



DRAFT SUMMARY REPORT AND CONCEPTUAL RI/FS WORK PLAN OUTLINE

FOR

**ROCKAWAY BOROUGH WELL FIELD SITE
OPERABLE UNIT #3
FOR PROPERTY OF
KLOCKNER & KLOCKNER
ROCKAWAY BOROUGH, NEW JERSEY**

SUBMITTED TO:

**USEPA - REGION II
EMERGENCY & REMEDIAL RESPONSE DIVISION
NEW YORK, NEW YORK**

SUBMITTED BY:

**THE WHITMAN COMPANIES, INC.
EAST BRUNSWICK, NEW JERSEY**

ON BEHALF OF KLOCKNER & KLOCKNER

IN ACCORDANCE WITH:

**ADMINISTRATIVE ORDER ON CONSENT
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- 5. Analytical Results for Metal Chip Samples
- 6. NJDEP-BFO Inspection Reports for Masden Industries
- 7. NJDEP Incident Report



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1.0 INTRODUCTION

This draft Summary Report and Conceptual RI/FS Study Work Plan Outline has been prepared pursuant to Chapter VIII, Paragraph 27 of the Administrative Order on Consent (AOC) and Task I, Item C of the Statement of Work (SOW) (USEPA, 1995) entered into by Klockner & Klockner and the United States Environmental Protection Agency (EPA). This draft Summary Report and Conceptual RI/FS Study Work Plan Outline has been prepared by The Whitman Companies, Inc., environmental consultants, on behalf of Klockner & Klockner.

The purpose of this draft Summary Report and Conceptual Remedial Investigation/Feasibility Study (RI/FS) Work Plan Outline is to:

- compile all existing and relevant data associated with the Rockaway Borough Wellfield Site - Operable Unit #3 at Block 5, Lots 1 and 6, and Block 7, Lot 7, in the Borough of Rockaway (Klockner Property) which will be utilized to determine additional data needs to characterize soil contamination at the Klockner Property, better define potential applicable or relevant and appropriate requirements (ARARs) and develop a range of preliminarily identified remedial alternatives; and
- identify and conceptually describe the major elements of the RI/FS Work Plan required for the RI/FS for soil at the Klockner Property.

1.1 Report Organization

This draft Summary Report and Conceptual RI/FS Study Work Plan Outline is organized as follows:

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- **Section 1** - this section presents the purpose of the draft Summary Report and Conceptual RI/FS Study Work Plan Outline, the Klockner Property location and the organization of the draft Summary Report and Conceptual RI/FS Study Work Plan Outline.
- **Section 2** - this section presents a history of the Site and Klockner Property, a description of the conditions at the Klockner Property, review of Sanborn Maps and aerial photographs, and a synopsis of previous investigations conducted at the Klockner Property.
- **Section 3** - this section presents information concerning hazardous substances present on the Klockner Property and a summary of the findings of past environmental investigations of the Klockner Property.
- **Section 4** - this section presents the conceptual RI/FS Work Plan outline for the investigation of soil contamination at the Klockner Property.
- **Section 5** - this section presents references.

The tables and figures are located in the tabulated sections identified as "Tables" and "Figures."

1.2 Klockner Property Location

The Klockner Property is located at the intersection of Stickle Avenue and Elm Street in the north end of the Borough of Rockaway in Morris County, New Jersey. The Klockner Property is a portion of the Rockaway Borough Well Field Site (Site), which itself encompasses approximately 2.1 square miles. See Figure 1.1 for the Klockner Property location on a U.S.G.S. Dover, N.J. quadrangle. A site map of the Klockner Property is included as Figure 1.2.

The Rockaway Borough well field is located approximately 600 feet southwest of the Klockner Property. The location of the Rockaway Borough well field and the Klockner Property are indicated on Figure 1.3.

The Klockner Property consists of two separate properties. One of the properties is located north of Stickle Avenue and is currently owned by Klockner & Klockner. This portion of the Klockner Property has been known for several years as the Building 12 Property, and will be referred to as such in this report. The second portion of the Klockner



Property is located south of Stickle Avenue and consists of two separate lots. Lot 7 is currently owned by Norman Iverson and operated by F.G. Clover Co. Lot 8 is currently owned by Klockner & Klockner and is used as parking for Building 12 tenants. This portion of the Klockner Property has been known as the Building 13 Property and will be referred to as such in this report.

Lot 8 of the Building 13 Property historically has been associated with Lot 7 and the operations there on. Accordingly, Lot 8 will be discussed as part of the Building 13 Property, even though it is now owned by Klockner & Klockner.

The Building 12 property consists of 1.34 acres. The majority (approximately 93%) of the Building 12 property is covered by building structures and pavement. The building structure consists of approximately 50,000 square feet of one and two story space used for manufacturing, office space and storage. The Building 12 Property is bordered to the south by Stickle Avenue, to the west by Oak Street and residential housing, to the north by Ford Road and to the east by Elm Street.

Lot 7 of the Building 13 property consists of approximately 1.07 acres, and Lot 8 consists of approximately 0.5 acres. There are two building structures present on the Building 13 property. The building coverage of the site is approximately 12,400 square feet. Approximately 50% of the property is covered by building structures and pavement. The Building 13 Property is bordered to the north by the Building 12 Property (across Stickle Avenue), to the west by residential properties (across Elm Street), to the south by residential property, and to the east by a railroad line.

2.0 BACKGROUND

2.1 Site History

The Site is a municipal well field that serves approximately 10,000 people. The Rockaway Borough's three water supply wells (#1, 5 and 6) draw water from an unconsolidated glacial aquifer from a depth ranging from 54 to 84 feet below grade. The supply wells are located off of Union Street and are southwest of the Klockner Property.

Contamination of the Site was first discovered in 1979. The primary contaminants identified were Trichloroethylene (TCE) and Tetrachloroethylene (PCE). Several inorganic contaminants, including Chromium, Lead and Nickel, were also identified. In December 1982, the Site was placed on the EPA's National Priorities List of Superfund sites.

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A Phase I RI/FS Study (SAIC, 1986) and Phase II RI/FS (ICF, 1991a and b) were subsequently conducted. Through these studies, the Klockner Property was identified as one of the source areas of the Site contamination.

The remediation of the plume of groundwater contamination originating from the Klockner Property area is being addressed by Thiokol Corporation pursuant to a Consent Decree entered into between it and EPA. An RI/FS Study of contaminated soils at the Klockner Property is being addressed by Klockner & Klockner through the October 1995 AOC and SOW.

2.2 Historic Ownership and Operations at Klockner Property

2.2.1 Building 12

In 1947, Block 5, Lot 6 of the Building 12 property was purchased by Daniel and Martha Klockner and Thomas and Blanche Heathcote (Klockner & Klockner's Predecessors). In 1963, the general partnership of Klockner & Klockner was formed and the ownership of Block 5, Lot 6 passed to it. In 1964, ownership of Block 5, Lot 1 of the Building 12 property was obtained by Klockner & Klockner. Block 5, Lot 1 of the Building 12 property was residentially developed property prior to its purchase by Klockner & Klockner in 1964. All of the Building 12 property is currently owned by Klockner & Klockner.

The building structures present on the Building 12 property were constructed in four phases. The years of construction were 1946, 1948, 1962/1963, and 1964 (GTI, 1986). The year of construction for each portion of the building is indicated on Figure 2.1.

From approximately 1949 to 1970, the Building 12 property was leased to Reaction Motors, Inc., a division of Morton Thiokol, Inc., predecessor to Thiokol Corporation. (Thiokol Corporation and its predecessors are referred to herein as "Thiokol.") Thiokol used the Building 12 property as a machine tool shop for manufacturing rocket engine parts.

In 1970, the building was subdivided and leased to a number of different tenants, including Carbone Ferraz, Inc. ("Carbone"), which used the facility for assembling fuses, and Masden Industries/Multi-Form Metals, Inc. ("Masden/Multi-Form"), which used the facility for manufacturing various glass, metal, and electrical components. A chronological breakdown of tenants at the Building 12 property is presented in Table 2.1.

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2.2.2 Building 13

In 1944, the Building 13 property was conveyed from Standard Oil to Klockner & Klockner's Predecessors.

From approximately 1949 to 1970, the Building 13 property was leased to Reaction Motors, Inc., a division of Morton Thiokol, Inc. Thiokol used the Building 13 property for manufacturing rocket engine parts. There are two building structures present on the Building 13 property. The buildings were referred to by Thiokol as Building 13 and Building 14 (Figure 2.2). Thiokol's operations in Building 13 included a machine shop and metal finishing process. Thiokol's operations in Building 14 included compressed air and power distribution, and pump testing.

From 1970 to 1981 Building 13 was leased to Carbone. Carbone used the facility for the manufacture of electric fuses. Operations involved the assembly of finished parts.

The Building 13 property was apparently subdivided into Lots 7 and 8 in 1981. In 1981, Lot 7 of the Building 13 property was conveyed from Klockner & Klockner to Norman Iverson. Mr. Iverson is the current owner of the Lot 7 Building 13 property. From 1981 to the present, Lot 7 of the Building 13 property has been occupied by F.G. Clover Co. F.G. Clover Co. is also owned by Mr. Iverson. F.G. Clover performs metal spinning and metal stamping operations. Klockner and Klockner has retained ownership of Lot 8 of the Building 13 property. Lot 8 is used for parking for the Building 12 tenants.

2.3 Sanborn Insurance Maps

To determine site history prior to the 1950's, Sanborn Insurance Maps were obtained for the years 1924, 1944 and 1951. Sanborn Insurance Maps include information on building structures and use. Copies of the maps are included as Figure 2.3, 2.4 and 2.5.

1924 Sanborn Insurance Map

The 1924 Sanborn Insurance Map indicates that Lot 1 of the Building 12 property contains dwellings and Lot 6 is undeveloped. The western portion of Building 13 property is undeveloped. The eastern portion is occupied by Standard Oil Co. Two aboveground oil tanks and four building structures are present.

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1944 Sanborn Insurance Map

The 1944 Sanborn Insurance Map indicates no change in use for the Building 12 property since 1924. Standard Oil Co. is no longer present on the Building 13 property. The aboveground oil tanks are no longer present. Two building structures are present that are labeled "Open and Vac." A section of railroad siding is present on the east side of the Building 13 property.

1951 Sanborn Insurance Map

The 1951 Sanborn Insurance Map indicates that Lot 6 of the Building 12 property and the Building 13 property have been developed and are being operated by Reaction Motors, Inc., for the manufacture of rocket motors. Building 12 is identified as a machine shop with concrete floors and steam heat from fuel oil. Building 13 is identified as an office building with concrete floors and steam heat from fuel oil. Building 14 is identified as a cafeteria. A railroad siding is present on the east side of the Building 13 property. Lot 1 of the Building 12 property remains in residential use.

2.4 Aerial Photographs

Aerial photographs were reviewed for the years 1940, 1951 and 1966. Aerial photographs provide information on property use and structures. Copies of the aerial photographs are included as Figures 2.6, 2.7 and 2.8.

1940 Aerial Photograph

The 1940 aerial photograph indicates the presence of row houses on Lot 1 of the Building 12 property. Lot 6 of the Building 12 property is undeveloped. A long thin building is located on the Building 13 property at the future location of Building 13. A second building is located at the location of Building 14. There appear to be three vertical aboveground storage tanks. The property appears to be unpaved with a centrally located dirt driveway to Stickle Avenue.

1951 Aerial Photograph

The 1951 aerial photograph indicates the presence of row houses on Lot 1 of the Building 12 property. A majority of Lot 6 is covered by a building structure (Building 12, Areas B and C). The future location of Building 12, Area E, appears to be used for outdoor storage and loading.



Building 13 and 14 are present on the Building 13 property. A railroad siding is present on the east side of the property. The area south of Building 13 appears to be a paved parking area. There does not appear to be any outdoor storage on the Building 13 property.

1966 Aerial Photograph

A 1966 aerial photograph of the Building 12 property was reviewed. The aerial photograph indicated the presence of all of the current Building 12 structures. Lot 1 no longer contains row houses. It is now partially covered by Building 12, Area A and the quonset hut. The remainder appears to be unpaved. The storage of drums is evident in the area north of Building 12, Area A.

2.5 Site Conditions

2.5.1 Site Geology/Hydrogeology (FE, 1989c)

Based on regional studies conducted by the NJDEP for the Rockaway Borough and Township well fields, the Klockner Property lies within a region in which the geology is characterized as consisting of glacial till deposited over shallow bedrock. However, valley fill deposits have been found to include other materials. The Klockner Property is situated on the remnants of the terminal moraine that developed during the Wisconsin glaciation. In addition, stratified and unstratified drift, alluvial deposits, and lacustrine silts and clays were found to be present in the typical lithologic section at the site. These glacial sediments may be as thick as 150 feet in the area.

Two distinct aquifers have been defined, which are referred to herein as the shallow and deep aquifers. These aquifers are separated by a silty-clay confining unit. Examination of the data collected during the drilling and geologic sampling for site investigations, pursuant to the New Jersey Environmental Cleanup Responsibility Act (ECRA), shows that the Klockner Property is underlain with a layer of surficial fill materials that range in thickness from 2 to 8 feet. The fill materials are generally composed of sands, silts, clays and some gravel. Underlying the fill is a yellow or tan sandy alluvial deposit which forms the shallow aquifer. The saturated thickness of the sandy alluvium is as great as 10 feet and appears to thin toward the north. This unit acts as the water table aquifer beneath most of the site.

The sandy alluvium lies on an irregular surface of lacustrine, laminated silt and clay which ranges in thickness from about 10 to over 20 feet. The top of this silty clay unit



slopes toward the surface at the north end of the Klockner Property and rises above the elevation of the water level in the shallow aquifer. In this area the alluvium thins to about 4 feet and becomes unsaturated. The contact between the alluvium and the lacustrine sediments is often detected as a color change from yellow or tan to gray which accompanies the lithologic change. As indicated by the approximate 9 foot head difference between the shallow and deep aquifer water levels, the lacustrine sediments form an areally extensive confining unit between the shallow and deep aquifers beneath the Klockner Property. The lithologic character of the confining unit ranges from sandy silt to silty clay.

Beneath the silty-clay confining unit is the thickest and most permeable unit of the valley-fill deposits which forms the deep aquifer. The materials encountered during drilling of the deep wells on the Klockner Property were reworked glacial till including silt, sand, coarse gravel, cobbles and boulders. Groundwater levels in the deep aquifer generally rise above the top of the aquifer, indicating that the unit is semi-confined locally although it has been depicted as the water table aquifer elsewhere. A cross section of the subsurface geology is provided in Figure 2.9.

2.5.2 Topography/Drainage

The southern portion of the Building 12 property is covered by building structures. The northern portion of the Building 12 property is paved and slopes to the south. The southern portion of Lot 7 of the Building 13 property slopes to the southwest, and the northern portion slopes to the north. The Lot 8 portion of the Building 13 property is relatively flat with an increase in elevation on the east end. The Klockner Property is located at an elevation of 520 to 525 feet above mean sea level. A survey of the Klockner Property topography is provided in Figure 2.10.

In general, Building 12's drainage is collected in storm sewer catch basins and storm drains which discharge to the Borough of Rockaway storm sewer system. Building 13's drainage is collected in an on site storm sewer catch basin and catch basins located on Stickle and Elm Street which discharge to the Borough of Rockaway storm sewer system. The storm sewer system discharges to the former Morris Canal, located approximately 800 feet south of the Klockner Property. The former Morris canal drains into the Beaver Brook. The Beaver Brook is located approximately 1,000 feet east of the Klockner Property. The Rockaway River is located approximately 1,800 feet southeast of the Klockner Property. The site location on the U.S.G.S. Dover, New Jersey Quadrangle is indicated on Figure 1.1. Access has not been approved for the Building 13 interiors at this time. Information concerning the interiors of Building 13 will be included in our next submission, provided that access is obtained prior to that time.

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2.6 Previous Investigations

2.6.1 Investigation of the Site

In 1985, a Borough of Rockaway Well Field Site Phase I RI/FS Study (SAIC, 1986) was conducted for the New Jersey Department of Environmental Protection (NJDEP). The Phase I RI/FS concluded that the groundwater contamination at the Site was derived from multiple locations in the Borough of Rockaway. One of the locations identified was the Klockner Property.

A Phase II RI/FS Study (ICF, 1991a and 1991b) was conducted for the EPA. The Phase II RI/FS concluded that groundwater in the northeast portion of Rockaway Borough is contaminated with Volatile Organic Compounds (VOCs) and inorganic compounds. The primary contaminants are TCE, PCE and metals. The Klockner Property was identified as a source of the VOCs groundwater contamination that impacted the Borough of Rockaway Well Field, particularly supply well #6.

The remediation of the plume of groundwater contamination originating from the Klockner Property area is being addressed by Thiokol through a Consent Decree with EPA. Thiokol is currently conducting activities necessary to design the remedial treatment system for the remediation of the plume of groundwater contamination originating from the Klockner Property area.

2.6.2 Investigation Under the New Jersey Environmental Cleanup Responsibility Act (ECRA) - Building 12 Property

In August 1985, ECRA was triggered by the pending sale of the Building 12 property. The operations of two tenants, Service Metal Fabricating (ECRA Case #85552) and Masden Industries/Multiform Metals (ECRA Case #85551) were subject to ECRA. As a result of the ECRA trigger, a comprehensive environmental investigation of the Building 12 Property ensued, under NJDEP review and oversight.

In November 1985, the ECRA Site Evaluation Submission (SES) for Masden Industries was submitted to NJDEP. The SES included a Sampling and Analysis Plan for the Building 12 property. The report identified areas of potential environmental concern, including three underground heating oil tanks. The tanks are identified as Tanks #1, #2, and #3. Tanks #1 and #2 were 1,000 gallons in capacity, and tank #3 was 5,000 gallons in capacity. Soil sampling around each of the tanks was proposed. The Sampling and

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Analysis Plan was revised on December 3, 1985 based on NJDEP comments issued on November 21, 1985.

On December 23, 1985, the Service Metal Fabricating facility was inspected by the NJDEP ECRA case manager (Ground/Water Technology, Inc. [GTI], 1986 Appendix B). No deficiencies were noted. The presence of chromium solutions was indicated. All that remained to close the Service Metal Fabrication ECRA Case was the submittal of a Negative Declaration. The Masden Industries facility was also inspected on December 23, 1985. Eleven deficiencies and actions to be taken were noted (NJDEP, 1985) (Attachment 1).

Two additional areas of potential environmental concern were identified prior to the commencement of the Sampling and Analysis Plan. These areas were the storm sewer catch basins on the north side of the facility and the 1,000 gallon underground waste oil tank. The catch basin was identified due to the presence of drum storage in this vicinity as noted in the December 23, 1985 NJDEP Site Inspection Report. The waste oil tank contents were sampled and analysis indicated the presence of TCE at 92%.

The three underground heating oil tanks and the waste oil tank were removed in April 1986. Post-excavation soil samples were collected from the excavations by GTI and delivered to ICM Laboratory (ICM) (New Jersey Certified Laboratory #14116) for the appropriate analysis. The sediments were removed from the catch basins. A sample of the sediment was delivered to ICM for appropriate analysis.

On May 22, 1986, additional soil excavation was conducted at two of the heating oil tank locations and the waste oil tank location based on the April 1986 post-excavation sample results. All of the excavated contaminated soils were properly disposed off-site. Post-excavation soil samples were collected from the excavations by GTI and delivered to ICM Laboratory for the appropriate analysis.

The analytical results for the sampling activities were submitted to NJDEP on June 25, 1986. On September 11, 1986, NJDEP issued comments recommending the installation of both shallow and deep monitoring wells to investigate the potential impact of the waste oil tank on groundwater quality.

The results of the April and May 1986 sampling activities and a proposal for further sampling activities were submitted to NJDEP in the November 1986 Sampling Plan (Revised) (GTI, 1986). No further actions were proposed for the three heating oil tank excavations. An integrity test was proposed for the storm sewer system followed by



excavation if the system leaked. The investigation of groundwater was proposed based on the results of the waste oil tank excavation activities.

The November 1986 revised Sampling Plan was approved by NJDEP in a letter dated March 5, 1987. The storm sewer was integrity tested and found to leak. A fifth underground storage tank was found and subsequently excavated during August 1987. The tank contained gasoline and had a capacity of 550 gallons. Post-excavation samples were collected and indicated no further action was necessary for this area. Groundwater monitoring wells were installed in April and June 1987 by Moretrench Environmental Services (MES). The wells were sampled during the period of June 30 to July 2, 1987. A second round of groundwater sampling was conducted on August 7 and August 10, 1987. The analytical results indicated the presence of VOCs, primarily TCE and USEPA Priority Pollutant Metals (Metals).

The results of the approved November 1986 revised Sampling Plan activities and a proposal for further sampling activities were reported to NJDEP in the October 1987 Sampling Plan Results (MES, 1987). No further action was proposed for the gasoline tank excavation. The further investigation of groundwater contamination and soil sampling at the storm sewer system were proposed.

During October 1987, a fourth deep monitoring well was installed. Soil samples for laboratory analysis were collected from the well boring to determine the vertical distribution of VOCs contamination in soil below the water table. The monitoring well was sampled for laboratory analysis on November 25, 1987.

In November 1987, an engineering construction drawing for a degreaser pit located in Building 12 was found. The pit was located and field head space samples were analyzed from the sub-base below the pit with a portable gas chromatograph. The results were inconclusive.

On December 14, 1987, a former leaching pit was uncovered and soil samples were collected for laboratory analysis. The leaching pit was located at the southwest corner of the Building 12 property.

On April 15, 1988, NJDEP issued comments concerning the October 1987 Sampling Plan Results. NJDEP required the installation of additional monitoring wells to further delineate groundwater contamination. In August 1988, an ECRA Sampling Plan Addendum was submitted to NJDEP by First Environment on behalf of Klockner & Klockner in response to NJDEP's April 15, 1988 comments.

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On October 26, 1988, the storm sewer system was exposed and investigatory soil samples were collected for laboratory analysis.

During November 1988, a fifth and sixth shallow monitoring wells were installed. All of the on-site shallow monitoring wells were sampled for laboratory analysis in December 1988.

On June 8, 1989, a conditional approval of the August 1988 ECRA Sampling Plan Addendum was issued by NJDEP.

During February 1989, contaminated soils detected at the former leaching pit and one of the storm sewer catch basins were excavated. Post-excavation soil samples were collected and the soils were properly disposed off-site.

During August 1989, a Sampling Results report and At Risk Sampling results report (First Environment [FE], 1989a & b) were submitted to NJDEP by First Environment on behalf of Klockner & Klockner. The results of the remediation of the storm sewer system and leaching pit were provided. No further actions were proposed for these two areas. The further investigation of the degreaser pit area was proposed. The results of the groundwater investigation and proposal for a groundwater pump test were provided.

On September 18, 1989, a response to NJDEP's June 8, 1989 comment letter was submitted to NJDEP by First Environment on behalf of Klockner & Klockner.

On September 21, 1989, soil samples were collected from the soil beneath the degreaser pit for VOCs laboratory analysis. No contamination was detected.

During August and September 1989, four additional monitoring wells (2 shallow and 2 deep) and two shallow piezometers were installed. The monitoring wells were sampled on September 25 and September 27, 1989 for VOCs laboratory analysis. A pump test of the shallow aquifer beneath the Building 12 property was conducted from October 26, 1989 to November 7, 1989.

On November 13, 1989, NJDEP issued a letter requesting submittal of an ECRA withdrawal affidavit as there no longer existed an ECRA trigger at the Building 12 property, due to the termination of negotiations for the sale of the Building 12 property.

In December 1989, a Sampling Results report (FE, 1989c) was prepared by First Environment for Klockner & Klockner. It was indicated that the former use of the

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degreaser pit had not impacted underlying soils. The results of the September 1989 groundwater sampling the October/November 1989 shallow aquifer pump test were presented. First Environment concluded that the principal source of TCE groundwater contamination appeared to be the alleyway where the waste oil tank had been located. First Environment concluded that the principal source of PCE contamination was from an off-site source located south of the Building 12 property.

On January 12, 1990, NJDEP issued a letter requesting submittal of the groundwater sampling results (Attachment 2). The letter also provided a conditional approval of the August 1989 Sampling Plan Addendum. The conditions included a requirement to resample the gasoline tank excavation for VOCs analysis by EPA Method 624 and remediate PHC contaminated soil at catch basin #2 of the storm sewer system.

2.6.3 Investigation Following Withdrawal from the New Jersey Environmental Cleanup Responsibility Act (ECRA) - Building 12 Property

Klockner & Klockner continued the investigation of sources of TCE contamination after withdrawing from ECRA. The activities conducted were directed toward identifying and delineating potential TCE and PCE source areas. The areas investigated included the degreaser pit area, the alleyway between the quonset hut and the Masden Industries leasehold, the quonset hut and the southwest loading dock area. A majority of the sampling activities involved the use of field screening for VOCs vapors with a Photovac 10S50 or 10S70 portable gas chromatograph (GC). Field screening was conducted in accordance with NJDEP's "Field Delineation of Volatile Contamination Using Ambient Temperature Head Space Analysis." The investigation was conducted by First Environment.

On July 24, 1990, soil samples for laboratory analysis were collected from the scale room and alleyway. Metal chips were observed in the alleyway and sampled to identify the composition of the chips. The chips were identified as aluminum.

During December 1991 and January 1992, several rounds of soil vapor field sampling and soil samples for laboratory analysis were collected from the degreaser pit area, the alleyway, the quonset hut and scale room.

2.6.4 Building 13 Property

Sampling has been conducted at the Building 13 property as part of the 1986 and 1991 RI/FS's conducted for the Site and by NJDEP during tank removal activities conducted by F.G. Clover.

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A soil gas survey was conducted by Tracer Research Corporation during October 1985 as part of the Phase I RI/FS for the Site (SAIC, 1986). One of the sixty-two locations sampled included the Building 13 property. The results indicated that the Building 13 property was a potential source of the PCE groundwater contamination.

A deep monitoring well (SAI-07) was installed on Lot 8 of the Building 13 property as part of the Phase I RI/FS for the Site. The well has been sampled several times as part of the Phase I and Phase II RI/FS activities for the Site. The contaminant of concern identified in this well was TCE. A shallow monitoring well (FG-1) was installed on the Building 13 property by F.G. Clover. Sampling of this well was conducted as part of the Phase II RI/FS. Both PCE and TCE were detected in FG-1.

During October 1986, F.G. Clover removed two underground heating oil tanks. The tanks had capacities of 500 and 1,000 gallons. NJDEP personnel visited the site on October 9, 1986 (NJDEP, 1986a). A 1,000 gallon dry well, which had been installed by F.G. Clover for its waste process water, was identified during the site visit. Process waste water was discharged to the dry well. NJDEP collected a sample from the dry well and from one of the excavated tanks for laboratory analysis. The analytical results indicated the presence of organic compounds, but no TCE or PCE was detected. The dry well was subsequently removed from service by F.G. Clover. Monitoring well FG-1 was installed to investigate this area under NJDEP oversight. Mr. Iverson indicated that based on groundwater sample results, NJDEP did not require any further remedial activities.

3.0 SUMMARY REPORT

3.1 Hazardous Substance Use at Klockner Property

Hazardous substances have been used in the current and past operations present at the Klockner Property (Figure 3.1). Information concerning hazardous substance use was obtained from the following sources:

- Responses to EPA Forms 104 (e)
- Randolph Township Department of Health Industrial Surveys of 1980/81
- Right to Know Forms
- ECRA files for Masden Industries
- Site inspection on November 7, 1995

3.1.1 Building 12 Property

From approximately 1949 to 1970, the Building 12 property was leased to Reaction Motors, Inc., a division of Morton Thiokol, Inc. Thiokol used the Building 12 property as a machine tool shop for manufacturing rocket engine parts (Figure 3.2). Substances used by Thiokol included TCE and cutting oils (Archer, 1991). TCE was used in a degreasing unit which held approximately 100 gallons. The waste cutting oil drippings from metal shavings were collected in a drain in the former scale room which discharged to an underground storage tank. The metal shavings were placed in drums and stored outside the building prior to pick up for off-site reclamation. Thiokol claimed that the tank was 550 gallons in capacity and was installed in the location where Tank #3 subsequently was discovered. Thiokol also indicated that the waste cutting oil from the machinery and the waste TCE were placed in 55 gallon drums for off-site disposal. The drums of waste materials were stored outside the building. A 1966 aerial photograph indicates a significant quantity of drums being stored north of the building.

In 1970, the building was subdivided and leased to a number of different tenants. A breakdown of tenants at the Building 12 property is presented in Table 2.1. Information about hazardous substances used by many of the tenants is not available, although the type of operations of those tenants indicates minimal use, if any, of hazardous substances. The tenants for which information concerning hazardous substance use is available include Masden Industries, Carbone Ferraz, Service Metal Fabricating, Write-Mark Sales, May Architectural Woodworking and Morton Hahn. A description of hazardous substance use by these tenants is presented below.

Masden Industries

Masden Industries manufactured several products at the facility during its tenure at the Building 12 property from 1974 to 1993. Operations included the manufacture of glass-to-metal seals for the electronic component industry, glass bubble tubes for Christmas ornaments and a reserve energizer for battery systems, graphite and metal fixtures for the electronic component industry, and the fabrication of intricate wire forms (Masden, 1985) (Figure 3.3).

The hazardous substances used by Masden at the Klockner property included acids, bases, methylene chloride, ethylene glycol, TCE and methanol. Lists of hazardous substances historically present at the Masden Industries area are included Attachment 3. The lists include those generated for the Borough of Rockaway, the EPA, 1989 Right to Know Form, 1993 ECRA submission and NJDEP's investigation of hazardous substances



stored in a shed formerly located in the alleyway. Most of the mentioned lists are for materials disposed.

Cutting oils and lubricants were used for machining operations. The manufacture of Christmas lights involved the use of methylene chloride, ethylene glycol, sodium metaborate and sugar. No waste methylene chloride or ethylene glycol was generated during the conduct of this operation because it was used up in the process (Maraziti, 1992). Scrap metal generated by Masden was collected in drums for off-site reclamation.

TCE was used in a vapor degreaser for the metal stamping operation conducted from 1976 to approximately 1982. One 55 gallon drum of TCE was used every 6 months (Randolph, 1980). The degreaser used approximately 5 gallons of TCE at a time. The TCE was stored in a 55 gallon drum next to the degreaser. The degreaser was located on the east wall of the area leased to Masden. Any sludge generated in the degreaser was placed in an empty drum stored next to the degreaser and returned to the vendor (Maraziti, 1992). The Randolph Township Department of Health Industrial Survey for Multifunction Metals (Masden Industries) dated January 8, 1981 indicated that twelve empty TCE drums were removed from the site 6 months prior to the survey. The survey indicated the presence of 20 empty drums at the rear of the premises.

Carbone Ferraz, Inc.

Carbone leased space at both the Building 12 and Building 13 properties. Carbone leased the Building 12 property from 1978 to 1981, and the Building 13 property from approximately 1971 to 1981. Carbone assembled fuses from partially finished parts. Some limited machining operations were also conducted (Covington, 1991). Metal parts included silver, copper and brass.

Hazardous substances associated with Carbone's operations included lubricating and cutting oils and PCE. Small quantities of dielectric plating solutions containing silver, nickel and tin were purchased in small jars and used for touch up plating of defects in purchased plated parts (Covington, 1992). A small apparatus for the hand plating was housed in a cabinet in Building 12. Limited quantities of lubricating and cutting oils were used for machining operations. The oils and spent oils were stored in drums.

PCE was used to clean equipment. Carbone estimates that it purchased and used 55 gallons of PCE a year. The PCE was stored in a 55 Gallon drum located in Carbone's maintenance shop (Covington, 1991) or near the loading dock area in Building 12 (Covington, 1992). PCE may have also been purchased in smaller containers than drums.



A small quantity of PCE would be placed into a coffee can to clean equipment. The equipment was located indoors on concrete floors. The equipment would be cleaned with a rag or a brush dipped into the coffee can of PCE. Rags were discarded into the regular plant trash. The cans were covered between uses and reused until the PCE was depleted. When depleted, the cans would be refilled or when residue or grease built up in the can, the can was discarded into the plant trash.

Machining of metal parts created metal scrap and chips. These materials were collected in drums and placed in the storage area next to the loading dock in Building 12. The storage area was located indoors on a concrete floor. The scrap metal was removed from the property by a metal recycler.

The industrial survey conducted in 1981 by the Randolph Township Department of Health indicated the use of Power Cleaner for metal degreasing. The material was reported to be an organic solvent, not a chlorinated solvent. Sodium silicate and potassium silicate was also noted as being present. All of these materials were reported to be contained in 55 gallon drums.

Service Metal Fabricating

Service Metal Fabricating has been present at the Building 12 property since 1982. Operations were originally located in Area C of Building 12. Some time after 1985, the operations were expanded to include the quonset hut and a portion of Area B. When Masden ceased operations in 1993, Service Metal Fabricating expanded its operations into Area A.

Service Metal Fabricating operations include the machining and welding of metal parts. A majority of the metals machined are steel and stainless steel. Small quantities of lubricating and hydraulic oils are used by Service Metal Fabricating. In general, 10 gallons of oil are purchased at a time in 5 gallon containers. Occasionally, projects utilizing aluminum require application of a rust inhibitor. Four small rectangular tanks are used for this process. The tanks consist of a wash tank, two rinse tanks and a treatment tank. The treatment tank contains Iradite which contains chromium conversion. The water in the tanks is replenished as needed. The Iradite is stored in a 5 pound container located next to the tank and is added to the treatment tank as needed. The liquids in the tanks are very infrequently changed. When changed, the material is removed by an outside contractor and properly disposed off-site. Small containers of maintenance products including paints and paint thinners are stored in flammables storage cabinets located in the quonset hut. Small



quantities of waste oil generated from changing the oil in trucks and compressors is transported to a local gas station for proper disposal.

Scrap steel is collected in a dumpster located at the north end of the alleyway. The steel is cut with lasers and cutting oils are not used. The steel is removed from the site for off-site recycling.

Write-Mark Sales

Write-Mark Sales operations involve the warehousing and sales of prepackaged office products. Write-Mark Sales has been present in Building 12 since 1988. It does not appear that hazardous substances are used by Write-Mark Sales.

May Architectural Woodworking

May Architectural Woodworking (May) operations involve the manufacture of kitchen cabinets. May's operations have been present on the second floor of Area C since 1993. Hazardous substance use in May's operations include paints, wood stains and lacquer thinner. A permitted paint booth is located at the south end of May's leasehold. A paint storage closet is located adjacent to the paint booth. Usually less than 5 gallons of paint and ½ gallon of lacquer thinner are used in a typical weeks operation. These materials are stored in quart, 1 gallon and 5 gallon containers. A dumpster for trash is kept in the building.

Morton Hahn, Inc.

Morton Hahn, Inc. imports tropical shells and other nature products for distribution. Morton Hahn, Inc has leased space in Building 12 since 1979. Morton Hahn, Inc.'s operations do not appear to involve the use of hazardous substances.

3.1.2 Building 13 Property

From approximately 1949 to 1970 the Building 13 property was leased to Reaction Motors, Inc., a division of Morton Thiokol, Inc. Thiokol used the Building 13 property for manufacturing rocket engine parts. Thiokol's operations in Building 13 included a machine shop and metal finishing process. Operations in Building 14 included compressed air and power distribution, and pump testing. Information concerning hazardous substances used on the Building 13 property by Thiokol was not available. Based on the type of operations



conducted it is likely that cutting, lubricating and hydraulic oils and degreasing solvents were used.

From 1970 to 1981 Building 13 was leased to Carbone. Carbone used the facility for the manufacture of electric fuses. Carbone's use of hazardous substances are discussed in section 3.1.1 above.

From 1981 to the present, the Building 13 property has been occupied by F.G. Clover Co. F.G. Clover Co. is owned by the current property owner, Mr. Iverson. F.G. Clover performs metal spinning and metal stamping operations. An inspection of F.G. Clover's operations has not yet been conducted as an access agreement for the building interiors has not been reached. The exterior of the F.G. Clover property has been inspected. Further information concerning F.G. Clover's operations will be included in our next submission.

The 1994 Right to Know Survey for F.G. Clover indicates the presence of acetylene, nickel and copper sheets and Safety-Kleen solvent. The use of trisodium phosphate and small amounts of lubricants at the site was indicated in an NJDEP inspection report dated October 16, 1986 (NJDEP, 1986a). The results of samples collected by NJDEP from a dry well located on the property indicated the presence of VOCs and BNs (Attachment 4), F.G. Clover's response to the EPA 104(e) form indicated the use of Safety Kleen 105/140 Solvent (Clover, 1990). An EPA Notification of Hazardous Waste Activity form completed by F.G. Clover indicates the generation of F001 (chlorinated solvents), F002 (chlorinated solvents), U210 (PCE), U228 (TCE), D039 (PCE) and D040 (TCE) hazardous wastes.

3.2 Results of Previous Site Investigation Activities

The presence of soil contamination and groundwater contamination has been investigated at the Klockner Property through activities associated with the Site Phase I and Phase II RI/FS, ECRA compliance at the Building 12 property, investigation for the purpose of Rockaway Borough litigation at the Building 12 property, and NJDEP investigations at the Building 12 and 13 properties. The following areas of potential environmental concern were identified during the previous site investigation activities:

Building 12 Property

- Underground Heating Oil Tanks
- Underground Gasoline Tank
- Underground Waste Oil Tank
- Storm Sewer System



- Leaching Pit
- Degreaser Pit
- Alleyway
- Scale Room
- Quonset Hut
- Loading Dock Area
- Groundwater
- Other

Building 13 Property

- Underground Heating Oil Tanks
- Dry Well
- Soil Gas Survey
- Groundwater

A summary of the findings in each of the areas listed above is provided below.

3.2.1 Heating Oil Tanks - Building 12 Property

Three underground fuel oil tanks (two 1,000 gallon and one 5,000 gallon) were excavated in April 1986 (GTI, 1986). The tank locations are indicated as Tank #1, Tank #2, and Tank #3 on Figure 3.1. Post-excavation soil samples were collected from the tank excavations for PHC analysis. PHC analysis indicated that additional soil removal was required at two of the tank locations to meet the NJDEP cleanup criteria at the time of 100 ppm. The highest PHC level detected was 480 ppm. Additional soil was excavated in May 1986 and post-excavation soil samples for PHC were collected. The post-excavation sample results were below 100 ppm for PHC. No further action was required by NJDEP. The analytical results are presented in Tables 3.1, 3.2 and 3.3. The sample locations are indicated on Figure 3.4.

3.2.2 Underground Gasoline Tank - Building 12 Property

A 550 gallon underground gasoline tank was found between Tanks #1 and #2. This tank was excavated during August 1987 (MES, 1987). Post-excavation samples were analyzed for VOCs by EPA Method 503.1. The results were None Detected for all of the sample locations. NJDEP's January 18, 1990 comment letter required resampling in two locations for VOCs by EPA Method 624. The requested samples have not been collected.



The analytical results are presented in Table 3.4. The sample locations are indicated on Figure 3.4.

3.2.3 Waste Oil Tank - Building 12 Property

The waste oil tank (Tank #4) was located adjacent to Tank #3 in an alleyway (Figure 3.1). The material contained in this 1,000 gallon tank was sampled for VOCs and Polychlorinated Biphenyls (PCBs) and was found to contain 92% Trichloroethylene (TCE). Oily water was also present in the tank when it was removed. The tank was excavated in April 1986 (GTI, 1986). The excavation was 7 feet deep. It was estimated that about 1 to 2 gallons of TCE spilled into the excavation during the tank removal. The spilled material was removed. Six post-excavation soil samples were collected from the excavation for PHC and VOCs analysis. PHCs were detected above the NJDEP cleanup criteria of 100 ppm in three of the sample locations. The highest PHC level detected was 470 ppm. VOCs were detected in 3 of the post-excavation samples at levels ranging from 1.49 to 6.14 ppm. The NJDEP cleanup criteria at the time was 1 ppm for total VOCs.

Additional excavation was conducted in May 1986 to a depth of 12 feet. Three post-excavation samples were collected down the centerline of the excavation for PHC and VOCs analysis. The PHC samples were all below 100 ppm. The VOCs samples were none detected in two and 1 ppm in one location. No further actions were proposed with respect to soil contamination based on the analytical results. Water was seeping into the excavation at a depth of 9 feet. Two samples of the water were collected for VO+15 analysis. One sample contained 0.208 ppm, and the other 1.99 ppm of TCE, PCE, and 1,2-DCE combined. The analytical results are presented in Table 3.5. The analytical results for TCE and PCE are presented in Table 3.6. The sample locations are indicated on Figure 3.4.

No further action with respect to soil contamination was required by NJDEP for the tank excavation.

The investigation of the groundwater quality included monitoring well installation and sampling in the vicinity of the waste oil tank excavation. Metals and VOCs were detected in the shallow groundwater above NJDEP's current Groundwater Quality Standards (GWQS), N.J.A.C. 7:9-6. Base/Neutral Extractable Compounds (BNs) were not detected.



3.2.4 Catch Basin/Storm Sewer - Building 12 Property

There are three catch basins connected in series on the north side of the property in a paved area. The catch basins discharge to the borough's storm sewer system on Elm Street. The catch basins were installed in 1972 and 1978.

Sediment samples were collected from the catch basin closest to the alleyway (catch basin #3) on April 18, 1986 for PHC, PCB, VO+15 and EPTOX Metals (GTI, 1986). PHCs were detected at a level of 3,200 ppm. The VOCs detected were TCE at 478 ppm, PCE at 95 ppm and trans-1,2-Dichloroethene (T-1,2-DCE) at 9.4 ppm. PCBs and EPTOX Metals were not detected at levels of concern. An integrity test was conducted in 1987 by plugging the sewer line and charging water to the system. The test indicated that the system leaked. The analytical results are presented in Table 3.7. The sample locations are indicated on Figure 3.5.

On October 16, 1987, monitoring well MW-4D was installed in the area adjacent to catch basin #1. Seven soil samples were collected from the well boring for laboratory analysis for VOCs. Samples collected from depths of 2 - 4 feet and 8 - 10 feet were none detectable for VOCs target compounds. Acetone was detected and attributed to field decontamination procedures. VOCs, including TCE, PCE, T-1,2-DCE, Benzene, Ethylbenzene and Xylenes, were detected at levels well below 1 ppm in the samples collected from 13 to 36 feet. MW-1S is located in this area and groundwater sampling has indicated the presence of TCE, PCE and T-1,2-DCE. The analytical results are presented in Table 3.8. The sample locations are indicated on Figure 3.12.

On October 26, 1988, soil samples were collected from a depth of 1 foot below the invert of the catch basins and sewer line joints for VOCs and PHC analysis (FE, 1989a). VOCs levels at catch basin #3 ranged from 5 to 59 ppm (includes Library Search). The concentrations of TCE, PCE and T-1,2-DCE were as high as 4.2 ppm, 1.6 ppm and 8.1 ppm respectively. VOCs levels were below the ECRA Cleanup Guidelines at the time of 1 ppm in the samples collected along the rest of the system. PHC levels were detected in several locations above the ECRA Cleanup Guideline at the time of 100 ppm and were as high as 3,000 ppm. In February 1989, the soil around catch basin 3 was excavated to a depth of 9 feet. The area of the excavation was 16 feet x 10 feet. Post-excavation samples indicated that the soil had been excavated to levels below the ECRA Cleanup Guidelines at the time for VOCs and PHCs. The analytical results are presented in Tables 3.9 and 3.10. The sample locations are indicated on Figure 3.5.



No further action was proposed. NJDEP's January 17, 1990 comment letter required further remediation of the remaining PHC contamination detected along the sewer line in excess of the ECRA guideline at the time of 100 ppm. Based on the current NJDEP Soil Cleanup Criteria of 10,000 ppm for PHCs, further remediation of this area may not be required.

3.2.5 Leaching Pit - Building 12 Property

A leaching pit was found at the corner of the property adjacent to Stickle Avenue and Elm Street. On December 14, 1987, the pit was excavated (First Environment, 1988). A 3 inch clay pipe leading to the pit from the building was observed. The source of the pipe was not determined. The pit was constructed with cinder block walls. The pit was found to be filled with various fill materials including debris. A medium course sand was encountered at a depth of 9 feet. A composite soil sample was collected from below the base of the pit at a depth of 11 feet using a back hoe bucket. The sample was analyzed for VOCs and indicated the presence of 0.37 ppm of TCE, 0.087 ppm of PCE, and 0.019 ppm of 1,2-DCE on a wet-weight basis. The analytical results are presented in Table 3.11.

Monitoring well MW-6S was installed adjacent to the leaching pit (First Environment, 1989a). Soil samples were collected from 2 foot intervals to a depth of 19 feet. The samples were analyzed for VOCs. No VOCs were detected to a depth of 9 feet. VOCs detected from a depth of 9 feet to 19 feet were well below the ECRA Cleanup Guideline of 1 ppm. The analytical results are presented in Table 3.12. The sample locations are indicated on Figure 3.12.

The pit was re-excavated on February 10, 1989 to a depth of 12.5 feet (FE, 1989a). A total of 18 post-excavation soil samples for VOCs analysis were collected. The samples were collected from depths of 7.5, 11.5 and 12.5 feet. Post-excavation samples indicated that VOCs were well below the ECRA Guideline level for VOCs. One sample located on the Elm Street side of the excavation and near a storm sewer line contained Library Search compounds at a level of 34.9 ppm. This level was above the ECRA guideline at the time of 1 ppm for total VOCs. This is not a concern as the current NJDEP Soil Cleanup Criteria for total VOCs is 1,000 ppm. The analytical results are presented in Table 3.13. The sample locations are indicated on Figure 3.6.

No further action was proposed for this area. However, it does not appear that any soil samples for BNs or Metals were collected from this area and the purpose of the pit was never determined. On December 14, 1988, the shallow groundwater in MW-6S was



analyzed for BNs and Metals (FE, 1989a), and metals were detected at levels above the current NJDEP GWQS.

3.2.6 Degreaser Pit - Building 12

The degreaser pit was constructed of concrete and was installed in 1965. The concrete pit's dimensions are approximately 7 feet by 19 feet by 4 feet deep. A sump located in the corner of the pit measures 1 foot by 1 foot by 1 foot deep. Construction diagrams indicate that the concrete forming the pit is 6 inches thick. On September 21, 1989, two soil samples were collected beneath the pit for laboratory VOCs analysis. The analytical results were none detected. An old Thiokol map indicated that a process monorail was used for the degreasing process.

First Environment also collected samples in this area for the purpose of providing data in support of litigation. Samples for VOCs laboratory analysis were submitted to ICM Laboratories. Soil vapor field screening samples were analyzed by a Photovac 10S50 or 10S70 portable GC. Field screening was conducted in accordance with NJDEP's "Field Delineation of Volatile Contamination Using Ambient Temperature Head Space Analysis." On December 19 and 20, 1991 and January 10 and 17, 1992, soil vapor samples were collected in the vicinity of the pit along the path of the monorail at depths of 3 and 5 feet in nineteen locations (VD-1 to VD-19). TCE and PCE vapors were detected in all the samples, the highest levels were detected at sample locations VD-5, VD-9, VD-10 and VD-19. The highest level detected was about 139 ppm. On January 17, 1992, two additional soil samples were collected at the locations with the high vapor readings for laboratory analysis. The samples were collected at a depth of 2.5-3 feet and analyzed for VOCs. TCE and PCE were detected in both samples at levels below that of concern (NJDEP's soil cleanup criteria). The analytical results are presented in Table 3.14, 3.15 and 3.16. The sample locations are indicated on Figure 3.7.

3.2.7 Alleyway - Building 12

The storage and handling of waste oil, spent solvent, and metal chips occurred in this area. Aluminum chips were found above and below the pavement in this area to a depth of 10 inches. On July 24, 1990, a soil sample ("At Back Door") was collected at a depth of 1.5-2 feet for laboratory analysis for VOCs. The analytical results indicated the presence of 1,2-DCE at 3.2 ppm. On July 24, 1990, two samples of the aluminum chips were collected by Mr. Joseph Klockner of Klockner & Klockner. The samples were analyzed by Materials Expertise, Inc. of Fairfield, New Jersey. The results indicated that the metal chips were aluminum based and contained only small amounts of other elements (Attachment 5).



The analytical results are presented in Tables 3.14 and 3.16. The sample locations are indicated on Figure 3.8.

On December 19, 1991, three soil samples (AL-1 to AL-3) were collected and field screened for VOCs. TCE was detected at all three locations with the highest level detected being 2.4 ppm at location AL-3. On January 13, 1992, soil vapor samples were collected at a depth of 3 feet at four locations (AL-4 to AL-7). TCE was detected at all four locations with the highest level detected being 20 ppm at location AL-5-VP. Sample AL-5-VP was collected from the aluminum chips. On January 20, 1992, a confirmation soil sample for laboratory VOCs analysis was collected at location SS-3 from a depth of 2.5-3 feet. The analytical results were 0.67 ppm of TCE and 0.021 ppm of PCE. The analytical results are presented in Tables 3.14 and 3.16. The sample locations are indicated on Figure 3.8.

First Environment collected samples in this area. Samples for VOCs laboratory analysis were submitted to ICM. Soil vapor field screening samples were analyzed by a Photovac 10S50 or 10S70 portable GC. Field screening was conducted in accordance with NJDEP's "Field Delineation of Volatile Contamination Using Ambient Temperature Head Space Analysis."

3.2.8 Scale Room - Building 12

The former scale room was located in the southeast corner of 1964 addition (Area A). The drain pipe to the former underground waste oil tank is located in the former scale room. On July 24, 1990, a soil sample ("Funnel Area") was collected adjacent to the pipe at a depth of 14-20 inches for laboratory analysis for VOCs. The VOCs TCE, PCE and T-1,2-DCE were detected at levels of 16 ppm, 0.012 ppm and 1.1 ppm respectively. Field screening for VOCs was conducted from residual materials in the drain pipe and oily sludge in the bottom of the scale pit ("Scale Pit Bottom Sludge"). TCE and PCE were not detected in the field screening samples. The analytical results are presented in Tables 3.14 and 3.16. The sample locations are indicated on Figure 3.9.

On January 13, 1992, an observation hole was jackhammered through the floor 3 feet from the drain pipe. The floor was opened to inspect for the presence of pipes or structures that may have been part of a floor drain. None were observed.

First Environment collected samples in this area. Samples for VOCs laboratory analysis were submitted to ICM. Soil vapor field screening samples were analyzed by a Photovac 10S50 portable GC. Field screening was conducted in accordance with NJDEP's



"Field Delineation of Volatile Contamination Using Ambient Temperature Head Space Analysis."

3.2.9 Quonset Hut - Building 12

The Quonset Hut is located adjacent to the alleyway. It is believed that it was historically used for drum storage by Thiokol. It is currently used by Service Metal Fabricating, Inc. as a maintenance and storage area. On December 19, 1991, four soil samples (QH-1 to QH-4) were collected from below the concrete floor and paving in this area at a depth of 12-18 inches and field screened for VOCs. TCE levels ranged from 0.32-1.71 ppm and PCE levels ranged from 0.1-2.5 ppm. The analytical results are presented in Table 3.16. The sample locations are indicated on Figure 3.10.

On January 20, 1992, the location with the highest readings (QH-2) was resampled (SS-4) at a depth of 2.5-3 feet for VOCs by laboratory analysis. The analytical results indicated the presence of TCE at 2.3 ppm and PCE at 2.5 ppm. The analytical results are presented in Table 3.14. The sample locations are indicated on Figure 3.10.

First Environment collected samples in this area. Samples for VOCs laboratory analysis were submitted to ICM. Soil vapor field screening samples were analyzed by a Photovac 10S50 portable GC. Field screening was conducted in accordance with NJDEP's "Field Delineation of Volatile Contamination Using Ambient Temperature Head Space Analysis."

3.2.10 Loading Dock - Building 12

The loading dock area is located in the building addition constructed in 1962 (Area E). On January 13, 1992, three samples (LD-1 to LD-3) for VOCs field screening were collected beneath the floor. TCE was detected in one sample (LD-1) at a level reported as < 1 ppm. The analytical results are presented in Table 3.16. The sample locations are indicated on Figure 3.11. No further investigation of this area is proposed.

First Environment collected samples in this area. Samples for VOCs laboratory analysis were submitted to ICM. Soil vapor field screening samples were analyzed by a Photovac 10S50 portable GC. Field screening was conducted in accordance with NJDEP's "Field Delineation of Volatile Contamination Using Ambient Temperature Head Space Analysis."

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3.2.11 Groundwater Contamination - Building 12

An extensive groundwater investigation has been conducted at the Building 12 property. The results of the groundwater investigation indicated the presence of TCE, PCE and metals contamination in the shallow and deep groundwater beneath the Building 12 property. Seven shallow and six deep aquifer monitoring wells were installed as part of the ECRA investigation. The well locations are indicated on Figure 3.12. The shallow wells were sampled and analyzed for PHCs, VOCs, BNs and Metals. The contaminants detected at levels of concern (NJDEP's GWQS) included TCE, PCE, T-1,2-DCE, Arsenic, Chromium and Lead. The analytical results are presented in Tables 3.17, 3.18 and 3.19.

Isoconcentration lines for the PCE and TCE contaminant levels are plotted on Figures 3.13 and 3.14. Based on the TCE plot, it is apparent that the source of the TCE groundwater contamination is located at the alleyway. The plot of the PCE levels indicate a possible off-site source located south of the Building 12 property in the direction of the Building 13 property.

The deep wells were sampled and analyzed for VOCs. The contaminants detected at levels of concern (NJDEP's GWQS) included TCE, PCE and T-1,2-DCE. The analytical results are presented in Table 3.20, 3.21 and 3.22.

During January 1990, two soil borings were installed to investigate soil conditions below the water table. One of the borings (SB1-90) was installed in the alleyway and the other (SB2-90) near Stickle Avenue. Soil samples were collected from SB1-90 using Shelby Tubes for permeability testing and laboratory analysis for VOCs. The VOC samples were collected from the soil at the tip of the Shelby Tubes. Soil samples were also field screened with a Photovac 10S50. The analytical results for TCE and PCE for the samples collected from SB1-90 are plotted on Figure 3.15.

3.2.12 Other Areas - Building 12 Property

Other areas of concern identified which have not been sampled include the following:

1. A 1x1.5x4 foot deep opening was observed by NJDEP near the former boiler in Building 12 near the former scale room. It was determined that the opening was for the purpose of piping oil from the former heating oil tank located in the alleyway into the building.



2. A shed with a wood floor formerly was located in the alleyway. Various hazardous materials were stored in this shed including acids, bases, plating chemicals, methylene chloride and lubricants (Attachment 6).
3. The Randolph Township Health Inspector indicated in 1985 that there were 55 gallons of a cyanide containing solution, 55 gallons of a yellow substance and 250 gallons of a lead tin solution present outside the building (Attachment 7). The location was not indicated in the April 19, 1985 NJDEP Incident Report. Follow up investigations conducted by NJDEP during 1985 and 1986 indicated the presence of the drummed materials in the alleyway area (Attachment 6). Some drums were observed to be leaking, forming an approximately 4 foot by 10 foot spill. Runoff from this area would have flowed to the catch basin area, which was subsequently investigated and remediated except as detailed above.
4. An aerial photograph from 1966 indicated the storage of drums in the area north of Building 12. This area has not always been paved.
5. A sump is located against the Building 12 wall north of the former scale room area. This location is adjacent to the alleyway. The sump was used to collect non-contact cooling water. Currently, there is a sink in this area that is piped to the sump.
6. The Building 12 sanitary discharges have always been directed to the Borough of Rockaway's sanitary sewer system (GTI, 1986a). The property was undeveloped prior to the construction of Building 12 in the 1940's. The sanitary sewer discharge lines from the Building 12 property are indicated on Figure 3.4.

3.2.13 Underground Heating Oil Tanks - Building 13 Property

On October 4, 1986, F.G. Clover removed two underground heating oil tanks. The tanks had capacities of 500 and 1,000 gallons. One tank was located near the main entrance to Building 13 and the other was located at the southeast corner of Building 13. NJDEP personnel visited the site on October 9, 1986 (NJDEP, 1986a). No soil samples were collected to verify the integrity of the tanks. Mr. Iverson, the property owner, indicated to NJDEP that there were no problems with the tank. NJDEP collected a sample from one of the excavated tanks for laboratory analysis for VOCs. The analytical results indicated the presence of organic compounds associated with heating oil. No TCE or PCE was detected. The analytical results are presented in Table 3.23.



3.2.14 Dry Well - Building 13 Property

NJDEP personnel visited the site on October 9, 1986 (NJDEP, 1986a). A 1,000 gallon dry well for waste process water was identified during the site visit. Process waste water was discharged to the dry well. Mr. Iverson indicated to NJDEP that the discharge to the dry well consisted of trisodium phosphate and water. NJDEP collected a sample from the dry well for laboratory analysis for VOCs, BNs, Acid Extractable Organic Compounds and PHCs. The analytical results indicated the presence of organic compounds but no TCE or PCE was detected. The analytical results are presented in Table 3.23.

Monitoring well FG-1 was installed by F.G. Clover to investigate this area under NJDEP oversight. During the site visit conducted during the preparation of this report, Mr. Iverson indicated that the discharge to the dry well was rerouted to the sanitary sewer system and the dry well is no longer active. Mr. Iverson also indicated that based on the groundwater sample results from FG-1, NJDEP did not require any further remedial activities.

3.2.15 Soil Gas Survey - Building 13 Property

A soil gas survey was conducted by Tracer Research Corporation during October 1985 as part of the Phase I RI/FS for the Site (SAIC, 1986). One of the sixty-two locations sampled included the Building 13 property. Survey sample location 43 was collected from the southeast side of the Building 13 property. The results indicated the presence of PCE at a level of 21 parts per billion (ppb). Based on a comparison of PCE levels detected in the other sample locations, the Building 13 property was identified as a potential source of the PCE groundwater contamination. The isoconcentration map for PCE from the Tracer Research Report is included as Figure 3.16.

3.2.16 Groundwater - Building 13 Property

A deep monitoring well (SAI-07) was installed on Lot 8 of the Building 13 property as part of the Phase I RI/FS for the Site. The well has been sampled several times as part of the Phase I and Phase II RI/FS activities for the Site. The contaminant of concern identified in this well was TCE at 10.4 ppb.

A shallow monitoring well (FG-1) was apparently installed on the Building 13 property by F.G. Clover. In September 1990, sampling of this well was conducted as part of the Phase II RI/FS. Both PCE and TCE were detected in FG-1 at levels of 91 ppb and 160 ppb respectively.

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3.2.17 Former Aboveground Oil Tank - Building 13

The Sanborn Map for the year 1924 and aerial photograph for the year 1940 indicated the presence of three aboveground storage tank on the east side of the Building 13 property.

3.2.18 Oil Storage Shed - Building 13

Drums of oil are stored in a shed located on the south side of Building 13. A compressor is also present in the shed. A pipe is located at floor level which discharges at ground level outside the shed.

3.3 Acceptability of Data

A review of the existing data indicates that it was generated by following the appropriate NJDEP procedures required at the time of sampling. Soil samples, except where noted, were analyzed by a New Jersey certified laboratory using EPA analytical methods as required by NJDEP.

Field screening for VOCs was conducted in accordance with NJDEP's guidance document. The method utilized in the collection of the soil vapor samples was as follows (FE, 1992a):

"Soil vapor samples were collected via a dedicated soil vapor probe driven to the required depth. A 5/8 inch diameter steel probe was first driven to a depth of 3 feet. The 6 inch long intake of the probe was centered at the sample depth. A dedicated air tight vacuum sampling head equipped with sample septum, vacuum gage and isolation valve was attached to the top of the vapor probe. A carbon vane oilless vacuum pump was used to evacuate the probe and sampling head. Representative soil vapors are drawn into the vapor probe and pass through the sampling head to the pump. The sample is thereby prevented from entering the pump itself. The isolation valve is then closed trapping the soil vapor sample in the sampling head. Vacuum readings are taken during pumping and then after the isolation valve is closed to confirm that the vacuum is allowed to decay to atmospheric pressure before the sample is collected. After the vacuum decays, a sample of the soil vapor is extracted from the sampling head through the septum, using the gas tight syringe. The sample is then injected directly into a portable gas chromatograph for the field screening analysis."



The existing laboratory data is acceptable for the purpose of identifying areas requiring further investigation or no further investigation. The existing soil gas data is acceptable for determining the location of potential sources of VOCs contamination and guide any further sampling activities.

4.0 DRAFT CONCEPTUAL RI/FS WORK PLAN OUTLINE

The purpose of this draft Conceptual RI/FS Work Plan Outline (Work Plan Outline) is to identify and conceptually describe the major element in the RI/FS Work Plan. The performance of the RI and FS shall be in conformance with the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the National Oil and Hazardous Substance Pollution Contingency Plan (NCP), as well as guidance documents issued by EPA under CERCLA.

The following is a proposed outline of the RI/FS Work Plan:

1.0 Introduction

2.0 Background

2.1 Site History

2.2 Historic Ownership and Operations At Klockner Property

2.3 Sanborn Insurance Maps

2.4 Aerial Photographs

2.5 Site Conditions

2.6 Previous Investigations

3.0 Summary Report

3.1 Hazardous Substance Use at Klockner Property

3.2 Results of Previous Site Investigation Activities

3.3 Summary of Areas Requiring Further Investigation

3.4 Acceptability of Data

4.0 RI/FS Scope of Work

4.1 Identification of Remedial Alternatives

4.2 Determination of Applicable or Relevant and Appropriate Requirements (ARARs)

4.3 Summary of RI Objectives

4.4 Data Requirements



4.5 Data Quality Objectives

5.0 Task Descriptions for RI/FS

5.1 Task 1 - Scoping

5.1.1 Summary Report

5.1.2 RI/FS Work Plan

5.1.3 Field Operations Plan

5.1.4 Site Management Plan

5.2 Task 2 - Community Relations

5.3 Task 3 - Characterization of the Klockner Property

5.3.1 Field Investigation

5.3.2 Data Analysis

5.3.3 Data Management

5.3.4 Characterization Report

5.4 Task 4 - Identification of Candidate Technologies

5.5 Task 5 - Treatability Studies

5.6 Task 6 - EPA's Baseline Risk Assessment

5.7 Task 7 - Remedial Investigation Report

5.8 Task 8 - Remedial Action Objectives and Screening of Remedial Alternatives

5.9 Task 9 - Feasibility Study Report

6.0 Schedule of RI/FS Activities

4.1 Conceptual Description of Major Elements of the RI/FS Work Plan

4.1.1 Background and Summary Report

The Background and Summary Report sections of the RI/FS Work Plan will set forth the site description including the geographic location of the property; a synopsis of the Klockner Property's history and a description of previous responses conducted at the Klockner Property by local, state, federal or private parties; and a Summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Klockner Property.

4.1.2 RI/FS Scope of Work

The RI/FS Scope of Work section of the RI/FS Work Plan will provide a preliminary identification of remedial alternatives, a preliminary determination of applicable or relevant



and appropriate requirements (ARARs), a summary of RI objectives, data requirements, and data quality objectives (DQO).

4.1.3 Task 1 - Scoping

The Scoping section will identify the project planning deliverables. The deliverables identified will include the Summary Report, RI/FS Work Plan, Field Operations Plan and the Site Management Plan. The Field Operations Plan (FOP) will be included and will consist of a Sampling and Analysis Plan, Quality Assurance Project Plan and a Health and Safety Plan.

4.1.4 Task 2 - Community Relations

Community relations will be the responsibility of the EPA. This section will provide for assistance by Klockner & Klockner as needed.

4.1.5 Task 3 - Characterization of the Klockner Property

The Characterization section of RI/FS Work Plan will provide for the conduct of the field investigation activities proposed in the RI/FS Work Plan and FOP. The purpose of the field investigation activities will be to implement and document field support activities, investigate and define site physical and biological characteristics, define sources of contamination and describe the nature and extent of contamination. This section of the RI/FS Work Plan will also include provisions for data analysis, data management procedures and preparation of monthly Progress Reports and a Characterization Summary Report.

The following areas of potential environmental concern have been identified and proposed actions are presented:

Building 12 Property

1. Heating Oil Tanks

No further actions are proposed for this area of potential environmental concern under the RI/FS for the Klockner Property.



Building 12 Property

2. **Underground Gasoline Tank** The collection and analysis of the samples requested by NJDEP will be conducted under the current RI/FS for the Klockner Property.
3. **Waste Oil Tank** Tank #4 was located in an area where shallow TCE soil contamination has also been detected, and further investigation of this contamination will be proposed as part of the RI/FS Work Plan.

Due to the presence of metals in the groundwater above the GWQS, investigation of this area under the current RI/FS will include analysis for metals.
4. **Catch Basin/Storm Sewer** A soil sample should be collected from the location with the highest PHC concentration for BNs and Metals analysis to determine if further remediation is warranted in accordance with N.J.A.C. 7:26.
5. **Leaching Pit** No further action was proposed to NJDEP for this area. However, it does not appear that any soil samples for BNs or Metals were collected from this area and the purpose of the pit was never determined. On December 14, 1988, the shallow groundwater in MW-6S was analyzed for BNs and Metals (FE, 1989a), and metals were detected at levels above the current NJDEP GWQS. Therefore, sampling for Metals in this area will be proposed as part of the RI/FS Work Plan.



Building 12 Property

6. **Degreaser Pit**

It does not appear that any further action is necessary in this area. However, the field sample results do not correlate well with the lab results, raising the question as to whether the soil sample delivered to the lab was properly handled. As part of the RI/FS, a confirmatory sample for laboratory analysis will be proposed for this area.
7. **Alleyway**

Tanks #3 and #4 were also located in the alleyway. Additional soil sampling to define the limits of the contamination detected in this area will be proposed as part of the RI/FS Work Plan.
8. **Scale Room**

A scale is located in the center of the room. The underside of the scale will be inspected as part of the RI/FS to determine if a drain is below it. Any sludge would have to be removed and properly disposed. Additional soil sampling to define the limits of the contamination detected in this area will be proposed as part of the RI/FS Work Plan.
9. **Quonset Hut**

Additional soil sampling to define the limits of the contamination detected in this area will be proposed as part of the RI/FS Work Plan.
10. **Loading Dock**

No further investigation of this area is proposed.
11. **Groundwater Contamination**

Investigation and remediation of the groundwater beneath the Building 12 property is being conducted by Thiokol, and will not be addressed in the RI/FS for the Klockner property.



Building 12 Property

- | | |
|-------------------------------|--|
| 12. Opening for Boiler Piping | NJDEP did not require any further investigation of this area and none will be proposed as part of the RI/FS. |
| 13. Drum Storage Shed | Sampling will be proposed for this area as part of the RI/FS Work Plan investigation for the alleyway. |
| 14. Drum Storage in Alleyway | Sampling will be proposed for this area as part of the RI/FS Work Plan investigation for the alleyway. |
| 15. North Drum Storage Area | The investigation of the soil in this area will be proposed as part of the RI/FS Work Plan. |
| 16. Sump | This area will be included in the proposed RI/FS Work Plan activities for the alleyway area. |
| 17. Sanitary Discharges | No further investigation of this area will be proposed. |



Building 13 Property

- | | | |
|----|-------------------------------|--|
| 1. | Underground Heating Oil Tanks | Sampling to be proposed as part of the RI/FS Work Plan will include biased samples at the former tank locations. |
| 2. | Dry Well | No further investigation of this area is proposed. |
| 3. | Soil Gas Survey | The further investigation of potential sources of the TCE and PCE contamination will be proposed as part of the RI/FS Work Plan for the Klockner Property. |
| 4. | Groundwater | The further investigation of potential sources of the TCE and PCE contamination will be proposed as part of the RI/FS Work Plan for the Klockner Property. |
| 5. | Former Aboveground Oil Tanks | Sampling to be proposed as part of the RI/FS Work Plan will include biased samples at the former tank locations. |
| 6. | Oil Storage Shed | The further investigation of this area will be proposed as part of the RI/FS Work Plan for the Klockner Property. |

4.1.6 Task 4 - Identification of Candidate Technologies

The Identification of Candidate Technologies section of the RI/FS Work Plan will provide for the identification of candidate technologies for alternative analysis (Task 9). This section will provide for the conduct of a literature survey to gather appropriate information.



4.1.7 Task 5 - Treatability Studies

The Treatability Studies section of the RI/FS Work Plan will provide for the submittal of a Treatability Testing Work Plan, a Treatability Study FOP and a Treatability Study Evaluation Report.

4.1.8 Task 6 - EPA's Baseline Risk Assessment

The Risk Assessment section of the RI/FS Work Plan will describe information needed for EPA's baseline risk assessment.

4.1.9 Task 7 - Remedial Investigation Report

The Remedial Investigation Report section of the RI/FS Work Plan will provide for the submittal of a report summarizing results of field activities to characterize the Klockner Property, sources of contamination, nature and extent of contamination and fate and transport of contaminants.

4.1.10 Task 8 - Development of Remedial Action Objectives and Screening of Remedial Alternatives

The Development of Remedial Action Objectives and Screening of Remedial Alternatives section of the RI/FS Work Plan will provide for the development and screening of remedial alternatives, identifying areas or volumes of media to which general response actions may apply, identifying, screening and documenting applicable remedial technologies, assembling and documenting alternatives, refining alternatives and conducting and documenting a screening evaluation of each alternative.

4.1.11 Task 9 - Feasibility Study Report

The Feasibility Study Report section of the RI/FS Work Plan will provide for the detailed analysis of alternatives and submittal of a Feasibility Study Report.

4.1.12 Schedule of RI/FS Activities

The schedule section of the RI/FS Work Plan will provide a schedule to conduct the proposed RI/FS.



4.2 Summary of Area Requiring Further Investigation

The sampling activities conducted at the Building 12 property have identified the alleyway and adjoining areas as the likely source of TCE and PCE groundwater contamination at the Building 12 property. Known locations of TCE and PCE contamination are plotted on Figures 3.17 and 3.18. The former drum storage area north of Building 12 remains to be investigated. The delineation of the VOCs contamination in the alleyway and adjoining areas will be proposed as part of the RI/FS Work Plan. A soil vapor survey will be conducted followed by soil sampling. Additional sampling will be conducted at the catch basin and Tank #5 areas to satisfy outstanding NJDEP concerns. Sampling will also be conducted at the former leach pit to verify if metals are present at levels of environmental concern.

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TABLES

- 2.1 Klockner & Klockner Chronological List of Tenants Building No. 12
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- 3.8 Soil Sampling Results Monitoring Well MW-4D October 16, 1987
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- 3.11 Analytical Results Leaching Pit Invert Soil Sampling Volatile Organic Compounds By GC Screen December 14, 1987
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- 3.14 Analytical Results Soil Sampling in Degreaser Pit, Alleyway, Scale Room and Quonset Hut Areas
- 3.15 Field Screening Results For Soil Vapor Samples Collected in the Degreaser Pit Area
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- 3.17 Summary of Ground Water Sampling Results Shallow Monitoring Wells
- 3.18 Shallow Ground Water Sampling Results December 14, 1988
- 3.19 Analytical Results Shallow Ground Water Sampling September 1989
- 3.20 Summary of Ground Water Sampling Results Deep Monitoring Wells
- 3.21 Deep Ground Water Sampling Results Monitoring Well MW-4D November 25, 1987
- 3.22 Analytical Results Deep Ground Water Sampling September 1989
- 3.23 Analytical Results NJDEP Sampling Activities October 9, 1986



TABLE 2.1

**KLOCKNER & KLOCKNER
CHRONOLOGICAL LIST OF TENANTS
BUILDING NO. 12
(ELM STREET & STICKLE AVENUE)
ROCKAWAY BOROUGH - MORRIS COUNTY**

Area A

1964-Mar. 1970	Thiokol Chemical Corporation (Reaction Motors Division)	Manufactured Bull Pup Missiles for Armed Forces (machine shop operation)
1970-Aug. 1971	Vacant	
Sept. 1971-Sept. 1973	Rogers Container Corporation	Manufactured cookie containers and tin wastebaskets
Oct. 1973-Dec. 1974	Vacant	
Dec. 1974-Feb. 1993	Multi-Form Metals, Inc. (Masden Industries - Messrs. Mauriello/Fabend)	Forms intricate wire shapes and manufactures proximity fuses for Armed Forces
1993-Present	Service Metal Fabricating	See Area C - 1st Floor

Area B - 1st Floor

1948-Mar. 1970	Thiokol Chemical Corporation (Reaction Motors Division)	See Area A
Mar. 1970-Mar. 1972	Vacant	
April 1972-Mar. 1977	K & K Precision Plastics, Inc.	Plastic injection molders
April 1977-Aug. 1977	Vacant	

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TABLE 2.1 (continued)

Sept. 1977-1978	David Barbour t/a A & D Plastics	Plastic injection molders
Oct. 1977-Oct. 1979	Frameco, Inc.	Manufactured wood and aluminum picture frames
Mar. 1978-Feb. 1981	Carbone-Ferraz, Inc.	Manufactured fuses
Mar. 1981-Dec. 1984	Vacant	
June 1985-Sept. 1986	Ultimate Computer Service, Inc.	Warehoused obsolete computers
Oct. 1986-Mar. 1988	Vacant	
April 1988-Present	Write Mark Sales, Inc. (Portion)	Warehouses and sells office supplies
-Present	Service Metal Fabricating, Inc.	See Area C - 1st Floor

Area B - 2nd Floor

1948-1970	Thiokol Chemical Corporation (Reaction Motors Division)	Office
1970-1973	Vacant	
1973-1976	Casual Living Pools & Patio, Inc.	Warehoused pool and garden furniture
1995-Present	May Architectural Woodworking	See Area C - 2nd Floor

Area C - 1st Floor

1948-Mar. 1970	Thiokol Chemical Corporation (Reaction Motors Division)	See Area A
Mar. 1970-May 1972	Vacant	
June 1972-1973	Stonehill Industries, Inc.	Plastic product extruder
1973-May 1975	Vacant	
May 1975-Dec. 1975	Lighting Electric of PA., Inc.	Garage space
Jan. 1976-Sept. 1977	Vacant	

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TABLE 2.1 (continued)

Oct. 1977-Oct 1979	Frameco, Inc.	See Area B
Nov. 1979-Oct/ 1981	Vacant	
Nov. 1981-Dec. 1981	Technology Insulation, Inc.	Nothing
Dec. 1981-Aug. 1982	Vacant	
Sept. 1982-Present	Service Metal Fabricating, Inc.	Sheet metal fabrication

Area C - 2nd Floor

1948-1970	Thiokol Chemical Corporation (Reaction Motors Division)	Office
1970-1976	Vacant	
May 1976-May 1986	Just Sew, Inc. (Assigned to Elena Sports, Inc.)	Contract garment sewer
June 1986-Feb. 1988	Vacant	
Mar. 1988-Mar. 1989	Pierson Industries, Inc.	Warehoused plastic materials
April 1989-Aug. 1989	Vacant	
Sept. 1989-1993	Service Metal Fabricating, Inc.	See Area C - 1st Floor
1993-Present	May Architectural Woodworking	Kitchen cabinet fabrication

Area D (2nd Floor Only)

Previously Vacant		
Feb. 1979-Present	Morton Hahn, Inc.	Imports tropical shells

Area E

1963-Mar. 1970	Thiokol Chemical Corporation (Reaction Motors Division)	See Area A
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TABLE 2.1 (continued)

April 1970-Aug. 1971	Vacant	
Sept. 1971-1973	Rogers Container Corporation	See Area A
Oct 1973-Nov. 1974	Vacant	
Dec. 1974-Present	Multi-Form Metals, Inc. (Masden Industries - Messrs. Mauriello/Fabend)	See Area A
April 1988-Present	Write-Mark Sales, Inc. (Portion)	See Area B - 1st Floor
-Present	Service Metal Fabricating (Portion)	See Area C - 1st Floor

Note:

1. Certain of the written leases pertaining to the above tenants were terminated before the agreement term expired. The above dates give actual/approximate occupancy periods.
2. Occupancies shown above per building area relate to all or a portion of that area, as the case may be.
3. Source - Klockner & Klockner's February 20, 1990 response to EPA 104(e) Form.

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TABLE 3.1
TANK #1 SAMPLING RESULTS

Sample ID	Date	Depth	Location	Analysis*	Results (mg/kg)
1A	4/15/86	7'	Centerline	PHC	< 18
1B	4/15/86	7.5'	Centerline	PHC	< 17
1C	4/15/86	7.5'	Centerline	PHC	< 17
1D	4/15/86	7.5'	Sidewall	PHC	< 18
1E	4/15/86	7'	Sidewall	PHC	89 (91 Dup)
1F	4/15/86	7'	Centerline	PHC	< 18
1G	4/15/86	3'	Pipeline	PHC	< 20

* PHC = Petroleum Hydrocarbons

Source: GTI 1986

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TABLE 3.2
TANK #2 SOIL SAMPLING RESULTS

Sample ID	Date	Depth	Location	Analysis*	Results (mg/kg)
2A	4/15/86	9'	Centerline	PHC	480
2B	4/15/86	9.5'	Centerline	PHC	43
2C	4/15/86	9.5'	Centerline	PHC	< 18
2D	4/15/86	9'	Sidewall	PHC	92
2E	4/15/86	9.5'	Centerline	PHC	< 18
2F	4/15/86	9'	Sidewall	PHC	77
2G	4/15/86	9.5'	Sidewall	PHC	< 19
2H	5/22/86	10'	Sidewall	PHC	40
2I	5/22/86	10'	Sidewall	PHC	N.D.

* PHC = Petroleum Hydrocarbons

Source: GTI 1986

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TABLE 3.3
TANK #3 SOIL SAMPLING RESULTS

Sample ID	Date	Depth	Location	Analysis*	Results (mg/kg)
3A	4/15/86	6'	Centerline	PHC	31
3B	4/15/86	6.5'	Centerline	PHC	90
3C	4/15/86	6.5'	Centerline	PHC	< 18
3D	4/15/86	6.5'	Centerline	PHC	72
3E	4/15/86	6'	Sideline	PHC	220
3F	4/15/86	6.5'	Sideline	PHC	30
3G	5/22/86	9'	Sideline	PHC	20
3H	5/22/86	9	Sideline	PHC	24

* PHC = Petroleum Hydrocarbons

Source: GTI 1986

300099



TABLE 3.4
TANK #5 SAMPLING RESULTS

<u>Sample No.</u>	<u>Sample Location</u>	<u>Sample Depth</u>	<u>Total Volatile Organics (EPA Method 503.1)</u>
S-1	North end of base of excavation along tank spine	0-1' below tank invert	N.D.
S-2	Center of base of excavation along tank spine	0-1' below tank invert	N.D.
S-3	West sidewall of excavation	0-1' below tank invert	N.D.
S-4	South end of base of excavation along tank spine	0-1' below tank invert	N.D.
S-5	East sidewall of excavation	0-1' below tank invert	N.D.
S-6	Duplicate of S-5	0-1' below tank invert	N.D.

Source: MES, 1987

300100



TABLE 3.5
TANK #4 SOIL SAMPLING RESULTS*

Sample ID	Date	Depth	Location	Analysis**	Results (mg/kg)
4A	4/17/86	8'	Centerline	PHC	470.
4A	4/17/86	8'	Centerline	VOC	0.05
4B	4/17/86	8'	Centerline	PHC	< 18.
4B	4/17/86	8'	Centerline	VOC	1.49
4C	4/17/86	7'	Centerline	PHC	32.
4C	4/17/86	7'	Centerline	VOC	6.14
4D	4/17/86	7'	Centerline	PHC	< 40.
4D	4/17/86	7'	Centerline	VOC	3.87
4E	4/17/86	8'	Centerline	PHC	350.
4E	4/17/86	8'	Centerline	VOC	0.35
4F	4/17/86	7.5'	Sideline	PHC	120.
4F	4/17/86	7.5'	Sideline	VOC	N.D.
4G	5/22/86	12'	Centerline	PHC	10.
4G	5/22/86	12'	Centerline	VOC	N.D.
4H	5/22/86	12'	Centerline	PHC	78.
4H	5/22/86	12'	Centerline	VOC	N.D.
4I	5/22/86	12'	Centerline	PHC	86.
4I	5/22/86	12'	Centerline	VOC	1.0
Pit 4 Sample 1	5/22/86	9'	Sideline	VOC	0.208 mg/l
Pit 4 Sample 2	5/22/86	9'	Sideline	VOC	1.99 mg/l

N.D. = Not Detected

* All samples are soil matrix except seepage samples which are water matrix.

** PHC = Petroleum Hydrocarbons
VOC = Volatile Organic Compounds (GC scan)

300101

Source: GTI, 1986



TABLE 3.6
Trichloroethylene and Tetrachloroethylene
Post Excavation Results - Tank 4
April and May, 1986

	4A	4B	4C	4D	4E	4F	4G	4H	4I	PIT 4 SAMPLE 1	PIT 4 SAMPLE 2
SAMPLE LOCATION	4A	4B	4C	4D	4E	4F	4G	4H	4I	SAMPLE 1	SAMPLE 2
SAMPLE DEPTH (FEET)	8	8	7	7	8	7.5	12	12	12	9	9
SAMPLE DATE	<u>4/17/86</u>	<u>4/17/86</u>	<u>4/17/86</u>	<u>4/17/86</u>	<u>4/17/86</u>	<u>4/17/86</u>	<u>5/22/86</u>	<u>5/22/86</u>	<u>5/22/86</u>	<u>5/22/86</u>	<u>5/22/86</u>
trichloroethylene (ppb)	50	400	4,000	2,800	200	u	u	u	500	1,300	93
Tetrachloroethylene (ppb)	u	90	300	300	60	u	u	u	400	30	u

u = Undetected

ppb = Parts per billion

Source: First Environment, 1992

300102



TABLE 3.7
CATCH BASIN SEDIMENT SAMPLING RESULTS

APRIL 18, 1986

Volatile Organic Compounds (ppm)

Trichloroethylene	478
Tetrachloroethylene	94
t-1, 2-Dichloroethylene	<u>9.4</u>
Total Target Compounds	581.4
Total Library Search	3.7

Petroleum Hydrocarbons (ppm) 3,200

Polychlorinated Biphenyls (ppm) None Detected

EP Toxicity Test (ppm)

Arsenic	< 0.002
Barium	< 0.03
Cadmium	0.02
Chromium	0.02
Lead	< 0.06
Mercury	< 0.025
Selenium	< 0.005
Silver	< 0.03

Source: GTI, 1986



TABLE 3.8

SOIL SAMPLING RESULTS
MONITORING WELL MW-4D
OCTOBER 16, 1987

SAMPLE LOCATION SAMPLE DEPTH	MW-4D SOILS 2-4'	MW-4D SOILS 8-10'	MW-4D SOILS 13-15'	MW-4D SOILS 18-20'	MW-4D SOILS 20-22'	MW-4D SOILS 25-27'	MW-4D SOILS 34-36'	TRIP BLANK	FIELD BLANK
Volatile Organics (ppb)									
Targeted Peaks									
Trans-1,2-Dichloroethylene	u	u	17	25	11	u	u	u	u
Trichloroethylene	u	u	120	62	72	8	u	u	u
Benzene	u	u	7	u	u	u	6	u	u
Toluene	u	u	u*	u	u	u	u*	u	u
Ethylbenzene	u	u	6	u	u	u	5	u	u
Total Xylenes	u	u	17	u	u	u	15	u	u
Non-targeted Peaks (1)									
Acetone									
Methyl Cyclopentane Isomer	u	u	8	u	u	u	8	u	u
Unknown	u	u	81	u	u	u	77	u	u
Petroleum Hydrocarbons (ppm)	u	u	u	u	u	u	u	u	u

* = Estimated value, below the detection limit

u = Undetected

(1) = Estimated concentrations of tentatively identified compounds

NOTE: Analytes detected in both the sample and laboratory blank indicate laboratory caused contamination and are therefore not included in this table.

Source: First Environment, 1989a

300104



TABLE 3.2

PRELIMINARY SOIL SAMPLING RESULTS
CATCH BASIN/STORM SEWER SYSTEM
OCTOBER 26, 1988

SAMPLE LOCATION	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10
SAMPLE DEPTH	<u>58"</u>	<u>26"</u>	<u>38"</u>	<u>34"</u>	<u>34"</u>	<u>32"</u>	<u>32"</u>	<u>26"</u>	<u>50"</u>	<u>26"</u>
Volatile Organics (ppb)										
Targeted Peaks										
Methylene Chloride	u	u	u	u	u	7	u	u	u	u
1,1-Dichloroethylene	u	u	u	u	u	u	u	u	u	u
1,2-Dichloroethylene	u	11	u	u	u	u	u	u	13	u
Trichloroethylene	u	5	u	11	11	13	u	u	100	u
Tetrachloroethylene	u	u	u	u	u	u	u	u	u	u
Non-targeted Peaks (1)										
Unknown Hexane Isomer	6	6	u	6	u	8	6	u	9	16
Unknown Hydrocarbon	u	u	u	u	u	u	u	u	u	u
Unknown	u	u	u	u	u	u	u	u	u	u
Petroleum Hydrocarbons (ppm)	case-by-case	140	u	u	u	u	u	3,000	92	490

* = Estimated value, below the detection limit

u = Undetected

(1) = Estimated concentration of tentatively identified compounds

NOTE: Analytes detected in both the sample and laboratory blank indicate laboratory caused contamination and are therefore not included in this table.

Source: First Environment, 1989a

300105



TABLE 3.9 (continued)
Preliminary Soil Sampling Results
Catch Basin/Storm Sewer System - October 26, 1988

SAMPLE LOCATION	SS-11	SS-12	SS-13	SS-14	SS-15	SS-16	SS-17	SS-18	TRIP	FIELD
SAMPLE DEPTH	<u>39"</u>	<u>35"</u>	<u>34"</u>	<u>34"</u>	<u>32"</u>	<u>27"</u>	<u>50"</u>	<u>50"</u>	<u>BLANK</u>	<u>BLANK</u>
Volatle Organics (ppb)										
Targeted Peaks										
Methylene Chloride	u	u	u	u	u	u	u	u	u	u
1,1-Dichloroethylene	u	u	u	u	u	u	10	8	u	u
1,2-Dichloroethylene	9	14	20	7	23	1700	8100	2800	u	u
Trichloroethylene	175	200	200	61	220	4200	2900	1300	u	u
Tetrachloroethylene	u	u	u	u	37	u	1600	900	u	u
Non-targeted Peaks (1)										
Unknown Hexane Isomer	u	15	u	u	u	u	u	u	u	u
Unknown Hydrocarbon	u	u	u	u	u	53,400	u	u	u	u
Unknown	u	u	u	u	u	u	22	32	u	u
Petroleum Hydrocarbons (ppm)	600	u	u	42	170	13000	1300	350	u	u

u = Estimated value, below the detection limit

u = Undetected

(1) = Estimated concentrations of tentatively identified compounds

NOTE: Analytes detected in both the sample and laboratory blank indicate laboratory caused contamination and are therefore not included in this table.

Source: First Environment, 1989a

300106



TABLE 3.10

POST EXCAVATION SOIL SAMPLING RESULTS
CATCH BASIN/STORM SEWER SYSTEM
FEBRUARY 9, 1989

SAMPLE LOCATION SAMPLE DEPTH	SS-10 0'	SS-11 0'	SS-12 0'	SS-13 0'	SS-14 0'	SS-15 2'	SS-16 7'	SS-17 7'	SS-18 7'	SS-19 0'	SS-20 9'	TRIP BLANK	FIELD BLANK
Volatile Organics (ppb)													
Targeted Peaks													
Methylene Chloride	--	u	u*	u*	u	u	u	u	u*	u	20**	u	u
T-1,2-Dichloroethylene	--	u	4	u	10	93	u	6	5	u*	u	u	u
Trichloroethylene	--	u	6	u	6	250	u	7	u	5	u	u	u
Tetrachloroethylene	--	u	u	u	u	17	u	u	u	u	u	u	u
Non-targeted Peaks (1)													
Acetone	--	u	130	u	u	u	u	u	u	u	u	u	u
Unknown	--	u	5	u	u	u	u	u	u	u	u	u	u
Petroleum Hydrocarbons (ppm)	u	u	52	u	42	--	--	--	--	--	--	--	u

-- = Not analyzed

* = Estimated value, below the detection limit

** = Found in corresponding method blank, but is probably in the sample as well

u = Undetected

(1) = Estimated concentrations of tentatively identified compounds

NOTE: Analytes detected in both the sample and laboratory blank indicate laboratory cause contamination and are therefore not included in this table.

Source: First Environment, 1989a

300107



TABLE 3.11
ANALYTICAL RESULTS
LEACHING PIT INVERT SOIL SAMPLING
VOLATILE ORGANIC COMPOUNDS BY GC SCREEN*
DECEMBER 14, 1987

<u>Sample ID</u>	<u>t 1,2-dichloroethylene</u>	<u>TCE</u>	<u>PCE</u>	<u>Unknowns</u>
Trip Blank	ND	ND	ND	ND
Soil from 11-foot depth	19	87	370	77**

* Values are reported in ppb on a wet-weight basis; dry weight values may be as much as 3ppb higher for each compound.

** Breakdown of unknown compounds:

	<u>Retention Time</u>	<u>Est. Concentration (ppb)</u>
unk hydrocarbon	26.9	7
unk hydrocarbon	32.2	45
unk alkane	30.5	25

Source: First Environment, 1989



TABLE 3.12

SOIL SAMPLING RESULTS
MONITORING WELL MW-6S
NOVEMBER 5, 1988

SAMPLE LOCATION	MW-6S SOILS	MW-6S SOILS	MW-6S SOILS	MW-6S SOILS	MW-6S SOILS	MW-6S SOILS	MW-6S SOILS	MW-6S SOILS	MW-6S SOILS	DUP-1 SOILS	TRIP BLANK	FIELD BLANK
SAMPLE DEPTH	1-3'	3-5'	5-7'	7-9'	9-11'	11-13'	13-15'	15-17'	17-19'	(9-11')		
Volatile Organics (ppb)												
Targeted Peaks												
T-1,2-Dichloroethylene	u	u	u	u	u	u	u	u	6*	u	u	u
Trichloroethylene	u	u	u	u	u	u	u	u	13	u	u	u
Tetrachloroethylene	u	u	u	u	u	u	u	5	57	u	u	u
Non-targeted Peaks(1)												
Acetone	u	u	u	u	38	u**	u**	u	u**	u**	u	u
Unknown Hexane Isomer	u	u	u	u	u	7	7	u	5	5	u	u

* = Estimated value, below the detection limit

** = Not found in the corresponding method blank, but it is a common laboratory contaminant

u = Undetected

(1) = Estimated concentrations of tentatively identified compounds

NOTE: Analytes detected in both the sample and laboratory blank indicate laboratory caused contamination and are therefore not included in this table.

Source: First Environment, 1989a

300109



Analytical Results
Post Excavation Soil Sampling - Leaching Pit
February 10, 1989

SAMPLE LOCATION	ECRA	SS-21	SS-22	SS-23	SS-24	SS-25	SS-26	SS-27	SS-28	SS-29	SS-30
SAMPLE DEPTH	GUIDELINES	<u>12.5'</u>	<u>12.5'</u>	<u>12.5'</u>	<u>12.5'</u>	<u>12.5'</u>	<u>12.5'</u>	<u>12.5'</u>	<u>12.5'</u>	<u>12.5'</u>	<u>11.5'</u>
Volatile Organics (ppb)	1,000										
Targeted Peaks											
Tetrachloroethylene		u	u	u	33	30	u	u	38	6	u
Methylene Chloride		u	u	u	u	u	u	u	u	u	u
Non-Targeted Peaks (1)		u	u	u	u	u	u	u	586	94	u

u = Undetected

(1) = Estimated concentrations of tentatively identified compounds

* = Methylene chloride was detected in the sample as well as in the laboratory blank. Background contribution, if adjusted for sample dilution calculates to an estimated 40 ppb of methylene chloride.

NOTE: Analytes detected in both the sample and laboratory blank indicate laboratory caused contamination and are therefore not included in this table.

Source: First Environment, 1989a

300110



TABLE 3.13 (continued)
Analytical Results
Post Excavation Soil Sampling - Leaching Pit
February 10, 1989

PILE LOCATION	SS-31	SS-32	SS-33	SS-34	SS-35	SS-36	SS-37	SS-38	TRIP	FIELD
PILE DEPTH	<u>11.5'</u>	<u>11.5'</u>	<u>11.5'</u>	<u>7.5'</u>	<u>7.5'</u>	<u>7.5'</u>	<u>7.5'</u>	<u>7.5'</u>	<u>BLANK</u>	<u>BLANK</u>
Alkyl Organics (ppb)										
Targeted Peaks										
Tetrachloroethylene	160	10	U	U	U	U	U	U	U	U
Methylene Chloride	190*	U	U	U	U	U	U	U	U	U
Non-targeted Peaks	34,900	U	U	U	U	U	U	U	U	U

* Undetected

* Estimated concentrations of tentatively identified compounds

Methylene chloride was detected in the sample as well as in the laboratory blank. Background contribution, if adjusted for sample dilution calculates to an estimated 40 ppb of methylene chloride.

NOTE: Analytes detected in both the sample and laboratory blank indicate laboratory contamination and are therefore not included in this table.

Source: First Environment, August 1989a



TABLE 3.14

**ANALYTICAL RESULTS
SOIL SAMPLING IN
THE DEGREASER PIT, ALLEYWAY, SCALE ROOM AND QUONSET HUT AREAS**

<u>LOCATION</u>	<u>SAMPLE</u>	<u>DATE</u>	<u>DEPTH</u>	<u>TCE</u> <u>(ppm)</u>	<u>PCE</u> <u>(ppm)</u>	<u>T-1,2 DCE</u> <u>(ppm)</u>
Degreaser Pit	SS-39	9/21/89	10-14"	u	u	u
	SS-40	9/21/89	10-14"	u	u	u
	SS-1	1/17/92	2.5-3'	0.430	0.150	u
	SS-2	1/17/92	2.5-3'	0.180	0.140	u
Alleyway	"At Back Door"	7/24/90	1.5-2'	u	u	3.2
	SS-3	1/20/92	2.5-3'	0.670	0.021	u
Scale Room	"Funnel Area"	7/24/90	14-20"	16.000	0.012	1.100
Quonset Hut	SS-4	1/20/92	2.5-3'	2.300	2.500	u

TCE Trichloroethylene

PCE Tetrachloroethylene

T-1,2 DCE - Trans - 1,2 - Dichloroethylene

U Undetected

* Sample collected below pit invert

NOTE: Analytes detected in both the sample and laboratory blank indicate laboratory caused contamination and therefore are not included in this table.

Source: First Environment, 1989c and 1992

300112



TABLE 3.15
FIELD SCREENING RESULTS FOR SOIL VAPOR SAMPLES COLLECTED
IN THE DEGREASER PIT AREA

SAMPLE ID	VD-1-VP	VD-2-VP	VD-2-VP	VD-3-VP	VD-3-VP	VD-4-VP	VD-5-VP	VD-5-VP
SAMPLE DEPTH	<u>4.0'</u>	<u>3.0'</u>	<u>5.0'</u>	<u>3.0'</u>	<u>5.0'</u>	<u>3.0'</u>	<u>3.0'</u>	<u>5.0'</u>
Trichloroethene	6,000	34,000	17,000	65,000	40,000	30,000	87,000	106,000 ⁽¹⁾
Tetrachloroethene	1,000	11,000	5,000	18,000	8,000	1,000	7,000	8,000

ppb = Parts per billion

(1) = Estimated value; beyond calibration range

Field screen results with Photovac 10S50 in accordance with NJDEPE "Field Delineation of Volatile Contamination using Ambient Temperature Headspace Analysis".

NOTE: Samples collected on December 19 and 20, 1991 and January 10 and 17, 1992

Source: First Environment, 1992

300113



TABLE 3.15 (continued)
FIELD SCREENING RESULTS FOR SOIL VAPOR SAMPLES COLLECTED
IN THE DEGREASER PIT AREA

SAMPLE ID	VD-6-VP	VD-7-VP	VD-8-VP	VD-9-VP	VD-9-VP	VD-10-VP	VD-11-VP	VD-11-VP
SAMPLE DEPTH	<u>3.0'</u>	<u>3.0'</u>	<u>3.0'</u>	<u>3.0'</u>	<u>5.0'</u>	<u>3.0'</u>	<u>3.0'</u>	<u>5.0'</u>
Trichloroethene	54,000	1,000	36,000	125,000 ⁽¹⁾	90,000	105,000 ⁽¹⁾	16,000	7,000
Tetrachloroethene	40,000	1,000	32,500	14,000	25,000	12,000	5,000	5,000

1.

ppb = Parts per billion

(1) = Estimated value; beyond calibration range

Field screen results with Photovac 10S50 in accordance with NJDEPE "Field Delineation of Volatile Contamination using Ambient Temperature Headspace Analysis".

NOTE: Samples collected on December 19 and 20, 1991 and January 10 and 17, 1992

Source: First Environment, 1992

300114



TABLE 3.15 (continued)
FIELD SCREENING RESULTS FOR SOIL VAPOR SAMPLES COLLECTED
IN THE DEGREASER PIT AREA

SAMPLE ID	VD-12-VP	VD-13-VP	VD-14-VP	VD-15-VP	VD-16-VP	VD-17-VP	VD-17-VP	VD-18-VP	VD-19-VP
SAMPLE DEPTH	<u>3.0'</u>	<u>3.0'</u>	<u>3.0'</u>	<u>3.0'</u>	<u>3.0'</u>	<u>3.0'</u>	<u>5.0'</u>	<u>3.0'</u>	<u>3.0'</u>
Trichloroethene	110,000 ⁽¹⁾	94,000	90,000	54,000	80,000	94,000	24,000	96,000	80,000
Tetrachloroethene	75,000	93,000	97,000	80,000	80,000	15,000	1,000	55,000	20,000

ppb = Parts per billion

(1) = Estimated value; beyond calibration range

Field screen results with Photovac 10S50 in accordance with NJDEPE "Field Delineation of Volatile Contamination using Ambient Temperature Headspace Analysis".

NOTE: Samples collected on December 19 and 20, 1991 and January 10 and 17, 1992

Source: First Environment , 1992



TABLE 3.16

**FIELD SCREENING RESULTS FOR SOIL VAPOR SAMPLES COLLECTED
IN THE ALLEYWAY, SCALE ROOM, QUONSET HUT AND LOADING DOCK AREAS**

<u>LOCATION</u>	<u>SAMPLE</u>	<u>DATE</u>	<u>DEPTH</u>	<u>TCE*</u>	<u>PCE*</u>	<u>T-1,2-DCE*</u>
Alleyway	"Back Door Area"	7/24/90	10"	u	u	u
	"At Back Door"	7/24/90	18-24"	0.006	u	u
	AL-1	12/19/91	18"	0.090	0.015	u
	AL-2	12/19/91	12-18"	0.630	u	u
	AL-3	12/19/91	12-18"	2.400	u	u
	AL-4-VP	1/13/92	3'	20.000	u	u
	AL-5-VP	1/13/92	3'	60.000	u	u
	AL-6-VP	1/13/92	3'	5.000	u	u
Scale Room	AL-7-VP	1/13/92	3'	5.000	u	u
	"Funnel Pipe"	7/24/90	---	u	u	u
	"Scale Pit Bottom Sludge"	7/24/90	---	u	u	u
Quonset Hut	"Funnel Area"	7/24/90	14-20"	4.580	u	u
	QH-1	12/19/91	14-18"	0.320	<0.01 0	u
	QH-2	12/19/91	14-18"	1.710	2.500	u
	QH-3	12/19/91	14-18"	0.950	0.100	u
	QH-4	12/19/91	14-18"	0.390	u	u
Loading Dock	LD-1-VP	1/13/92	3'	<1.00 0	u	u
	LD-2-VP	1/13/92	3'	u	u	u
	LD-3-VP	1/13/92	3'	u	u	u



TABLE 3.16 (continued)

**FIELD SCREENING RESULTS FOR SOIL VAPOR SAMPLES COLLECTED
IN THE ALLEYWAY, SCALE ROOM, QUONSET HUT AND LOADING DOCK AREAS**

u Undetected
--- Not applicable
TCE Trichloroethylene
PCE Tetrachloroethylene
T-1,2 - DCE - Trans - 1,2 - Dichloroethylene
* Results presented in parts per million (ppm)

NOTE: Field screen results with Photovac 10S50 or 10S70 in accordance with NJDEP
"Field Delineation of Volatile Contamination Using Ambient Temperature
Headspace Analysis"

Source: First Environment, 1992

300117



Table 3.17
Summary of Groundwater Sampling Results
Shallow Monitoring Wells

PARAMETERS	MW1S		MW2S		MW3S	
	(6/30/87)	(8/7/87)	(6/30/87)	(8/7/87)	(7/2/87)	(8/7/87)
VOLATILE ORGANIC COMPOUNDS (ppb)						
Trans-1,2-dichloroethylene	130	43	51	97	N.D.	N.D.
Trichloroethylene	230	78	100	280	10	15
Tetrachloroethylene	22	N.D.	N.D.	28	50	82
Total	382	121	151	405	60	97
BASE/NEUTRALS + 15	N.D.	*	N.D.	*	N.D.	*
PRIORITY POLLUTANT						
METALS (ppm)						
Arsenic	0.007	N.D.	0.014	N.D.	0.014	N.D.
Chromium	0.009	0.014	0.028	0.02	0.019	N.D.
Copper	0.04	0.012	0.07	0.025	0.04	N.D.
Lead	0.023	0.015	0.047	0.025	0.109	N.D.
Zinc	0.09	0.07	0.017	0.08	0.14	0.04
Nickel	N.D.	0.11	N.D.	0.16	N.D.	N.D.
PETROLEUM HYDROCARBONS (ppb)	N.D.	*	N.D.	*	N.D.	*
FIELD MEASUREMENTS						
ph	8.8	*	8.8	*	*	*
Specific Conductance (ohms/cm)	496	*	193	*	*	*
Temperature (°C)	11.3	*	17	*	*	*

* Parameter Not Tested for

N.D. Not detected

** Identified but below detection limit

Source: MES, 1987

300118



[ABL] . 12]
SHALLOW GROUNDWATER SAMPLING RESULTS
DECEMBER 14, 1988

PIE LOCATION	MW-1S	MW-2S	MW-3S	MW-5S	MW-6S	DHP (MW-2S)	TRIP BLANK	FIELD BLANK
atile Organics (ppb)								
argeted Peaks								
-1,2-Dichloroethylene	11	320	u	6	24	310	u	u
hloroform	u	u	u	u	3	u	u	u
arbon Tetrachloride	u	u	u	u	12	u	u	u
richloroethylene	74	430	15	260	41	460	u	u
etrachloroethylene	u	41	89	51	150	40	u	u
n-targeted Peaks	u	u	u	u	u	u	u	u
e/Neutrals (ppb)								
argeted Peaks								
bis(2-ethylhexyl)phthalate	--	--	--	5	u	--	--	u
di-n-butyl phthalate	--	--	--	1	u	--	--	u
n-targeted Peaks (1)								
molecular sulfur	--	--	--	4	u	--	--	u
cyclohexadecane	--	--	--	u	10	--	--	u
als (ppm)								
rsenic	--	--	--	0.021	0.009	--	--	u
admium	--	--	--	0.002	u	--	--	u
hromium	--	--	--	0.075	0.021	--	--	u
opper	--	--	--	0.100	u	--	--	u
lead	--	--	--	0.149	0.034	--	--	u
ercury	--	--	--	0.0006	u	--	--	u
ickel	--	--	--	0.117	u	--	--	u
zinc	--	--	--	0.365	0.079	--	--	u
roleum Hydrocarbons (ppm)	--	--	--	u	u	--	--	u

= Not analyzed

= Estimated value, below the detection limit

= Undetected

1) = Estimated concentrations of tentatively identified compounds

NOTE: Analytes detected in both the sample and laboratory blank indicate laboratory caused contamination and are therefore not included in this table.

Source: First Environment, 1989a

300119



TABLE 3.19
ANALYTICAL RESULTS
SHALLOW GROUNDWATER SAMPLING
SEPTEMBER 1989

SAMPLE LOCATION	MW-1S	MW-2S	MW-3S	MW-4S	MW-5S
SAMPLE DATE	<u>9/25/89</u>	<u>9/27/89</u>	<u>9/25/89</u>	<u>9/25/89</u>	<u>9/25/89</u>
Volatile Organics (ppb)					
Targeted Peaks					
1,1-Dichloroethylene	u	u	u	u	7
Total-1,2-Dichloroethylene	85	180	15	460	u
Chloroform	u	u	u	u	u
Carbon Tetrachloride	u	u	u	u	u
Trichlorethylene	100	260	12	350	46
Tetrachloroethylene	u	29	97	u	21
Non-targeted Peaks (1)	u	250	u	u	u

u - Undetected

* - Estimated value, below detection limit

(1) - Estimated concentration of tentatively identified compounds

Note: Analytes detected in both the sample and laboratory blank indicate laboratory caused contamination and are therefore not included in this table.

Source: First Environment, 1989c

300120



Table 3.20
Summary of Groundwater Sampling Results
Deep Monitoring Wells

	MW1D		MW2D		MD3D		SAI-5	SAI-7
	(6/30/87)	(8/10/87)	(6/30/87)	(8/7/87)	(7/1/87)	(8/10/87)	(8/7/87)	(8/7/87)
<u>PARAMETERS</u>								
VOLATILE ORGANIC								
COMPOUNDS (ppb)								
Trans-1, 2-dichloroethylene	ND	ND	20	150	ND	ND	ND	3**
Trichloroethylene	23	14	120	730	180	41	ND	170
Tetrachloroethylene	<u>ND</u>	<u>6</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>
Total	23	20	140	880	180	41	0	170
BASE/NEUTRALS + 15	*	*	*	*	*	*	*	*
PRIORITY POLLUTANT								
METALS (ppm)								
Arsenic	*	*	*	*	*	*	*	*
Chromium	*	*	*	*	*	*	*	*
Copper	*	*	*	*	*	*	*	*
Lead	*	*	*	*	*	*	*	*
Zinc	*	*	*	*	*	*	*	*
Nickel	*	*	*	*	*	*	*	*
PETROLEUM HYDROCARBONS	*	*	*	*	*	*	*	*
FIELD MEASUREMENTS								
pH	8.6	7.3	8.5	*	7.6	7.9	8.6	9.4
Specific Conductance (ohms/cm)	472	541	367	*	575	486	638	365
Temperature (°C)	20	21.8	17.2	*	17.3	23.9	18.4	17.1

*Parameter not tested for

N.D. Not detected

** Identified but below detection limit

Source: MES, 1987

300121



TABLE 3.20 (continued)
ANALYTICAL RESULTS
SHALLOW GROUNDWATER SAMPLING
SEPTEMBER 1989

SAMPLE LOCATION	MW-6S	MW-7S
SAMPLE DATE	<u>9/25/89</u>	<u>9/25/89</u>
Volatile Organics (ppb)		
Targeted Peaks	155	458
1,1-Dichloroethylene	u	u
Total-1,2-Dichloroethylene	23	2*
Chloroform	3*	u
Carbon Tetrachloride	3*	u
Trichloroethylene	33	78
Tetrachloroethylene	99	380
Non-targeted Peaks (1)	u	u

u - Undetected

* - Estimated value, below detection limit

(1) - Estimated concentration of tentatively identified compounds

Note: Analytes detected in both the sample and laboratory blank indicate laboratory caused contamination and are therefore not included in this table.

Source: First Environment, 1989c



TABLE 3.21

DEEP GROUNDWATER SAMPLING RESULTS
MONITORING WELL MW-4D
NOVEMBER 25, 1987

SAMPLE LOCATION	<u>MW-4D</u>	<u>TRIP BLANK</u>	<u>FIELD BLANK</u>
Volatile Organics (ppb)			
Targeted Peaks			
Trichloroethylene	42	u	u
Non-targeted Peaks (1)	u	u	u

U = Undetected

(1) = Estimated concentration of tentatively identified compounds.

Source: First Environment, 1989a



TABLE 3.22
ANALYTICAL RESULTS
DEEP GROUNDWATER SAMPLES
SEPTEMBER 1989

SAMPLE LOCATION	SAI-5	MW-1D	MW-2D	MW-3D	MW-4D
SAMPLE DATE	<u>9/27/89</u>	<u>9/25/89</u>	<u>9/27/89</u>	<u>9/25/89</u>	<u>9/25/89</u>
Volatile Organics (ppb)					
Targeted Peaks					
1,1-Dichloroethylene	u	u	u	u	u
Total-1,2-Dichloroethylene	u	u	220	9	11
Chloroform	u	u	u	u	u
Carbon Tetrachloride	u	u	u	u	u
Trichloroethylene	u	14	3,600*	540*	110
Tetrachloroethylene	u	u	10*	5	u
Non-targeted Peaks (1)	u	u	u	u	u

u - Undetected

* - Estimated value, below detection limit

(1) - Estimated concentration of tentatively identified compounds

Note: Analytes detected in both the sample and laboratory blank indicate laboratory caused contamination and are therefore not included in this table.

Source: First Environment, 1989c

300124



TABLE 3.22 (continued)
ANALYTICAL RESULTS
DEEP GROUNDWATER SAMPLES
SEPTEMBER 1989

SAMPLE LOCATION SAMPLE DATE	TRIP BLANK <u>9/25/89</u>	FIELD BLANK <u>9/25/89</u>	TRIP BLANK <u>9/27/89</u>	FIELD BLANK <u>9/27/89</u>
Volatile Organics (ppb)				
Targeted Peaks	u	u	u	u
1,1-Dichloroethylene	u	u	u	u
Total-1,2-Dichloroethylene	u	u	u	u
Chloroform	u	u	u	u
Carbon Tetrachloride	u	u	u	u
Trichloroethylene	u	u	u	u
Tetrachloroethylene	u	u	u	u
Non-targeted Peaks (1)	u	u	u	u

u - Undetected

* - Estimated concentration, below detection limit

(1) - Estimated concentration of tentatively identified compounds

Note: Analytes detected in both the sample and laboratory blank indicate laboratory caused contamination and are therefore not included in this table.

Source: First Environment, 1989c

300125



TABLE 3.22 (continued)
ANALYTICAL RESULTS
DEEP GROUNDWATER SAMPLES
SEPTEMBER 1989

SAMPLE LOCATION	MW-5D	MW-6D	DUPLICATE
SAMPLE DATE	<u>9/27/89</u>	<u>9/25/89</u>	(SAI-5) <u>9/27/89</u>
Volatile Organics (ppb)			
Targeted Peaks			
1,1-Dichloroethylene	u	u	u
Total-1,2-Dichloroethylene	u	u	u
Chloroform	u	u	u
Carbon Tetrachloride	u	u*	u
Trichloroethylene	4.6	4	u
Tetrachloroethylene	u	u	u
Non-targeted Peaks (1)	10	u	u

a - Actual value is 4.7 ppb

u - Undetected

* - Estimated value, below detection limit

(1) - Estimated concentration of tentatively identified compounds

Note: Analytes detected in both the sample and laboratory blank indicate laboratory caused contamination and are therefore not included in this table.

Source: First Environment, 1989c

300126



TABLE 3.23
ANALYTICAL RESULTS
NJDEP SAMPLING ACTIVITIES
OCTOBER 9, 1986

Location Sample	Drywell PM005	Tank Contents PM006
<u>Volatile Organic Compounds + 15 (ug/l)</u>		
Benzene	u	50
Ethylbenzene	u	140
Methylene Chloride	1,510*	116*
Toluene	u	413
Total Xylenes	u	8,100
Library Search ⁽¹⁾	3,300	4,370
<u>Base/Neutral/Acid Extractable Compounds + 25 (ug/l)</u>		
Bis(2-ethyl hexyl) phthalate	80.7	---
Butyl benzyl phthalate	33.2	---
Naphthalene	5,980	---
Library Search ⁽¹⁾	35,474	---
Petroleum Hydrocarbons (mg/l)	4.7	---
---	Not-analyzed for parameter	
u	Undetected	
*	Contaminant also detected in blank and is likely due to laboratory contamination	

Source: ETC, 1986

300127



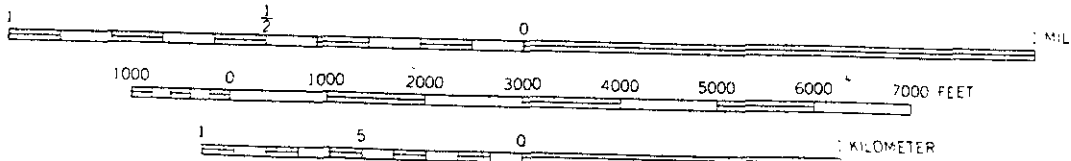
FIGURES

- 1.1 Site Location on U.S.G.S. Dover, NJ Quadrangle
- 1.2 Site Map of Klockner Property
- 1.3 Rockaway Borough Well Location Map
- 2.1 Site Map - Building 12
- 2.2 Site Map - Building 13
- 2.3 1924 Sanborn Insurance Map
- 2.4 1944 Sanborn Insurance Map
- 2.5 1951 Sanborn Insurance Map
- 2.6 1940 Aerial Photograph
- 2.7 1951 Aerial Photograph
- 2.8 1966 Aerial Photograph
- 2.9 Geologic and Hydrogeologic Cross Section
- 2.10 Topography of Klockner Property
- 3.1 Site Map of Klockner Property
- 3.2 Thiokol Operations - Building 12
- 3.3 Masden Industries Operations - Building 12 Area A
- 3.4 Underground Storage Tanks - Sample Locations
- 3.5 Catch Basin/Storm Sewer - Sample and Excavation Locations
- 3.6 Leaching Pit - Post Excavation Soil Sample Locations
- 3.7 Degreaser Pit - Sample Locations
- 3.8 Alley Way - Sample Locations
- 3.9 Scale Room - Sample Locations
- 3.10 Quonset Hut - Sample Locations
- 3.11 Loading Dock - Sample Locations
- 3.12 Monitoring Well Locations
- 3.13 Isoconcentration Map of PCE in the Shallow Ground Water
- 3.14 Isoconcentration Map of TCE in the Shallow Ground Water
- 3.15 Shelby Tube Test Results Sample Location SB1-90
- 3.16 Soil Gas Survey for PCE
- 3.17 Summary of PCE Contamination Detected at Building 12 Property
- 3.18 Summary of TCE Contamination Detected at Building 12 Property

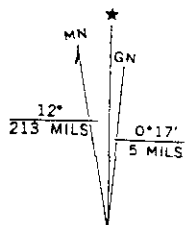




SCALE 1:24000




300130



UTM GRID AND 1981 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET



QUADRANGLE LOCATION

 THE WHITMAN Companies, INC.	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	SITE LOCATION ON USGS DOVER QUADRANGLE	
ORIG. BY: MM	DWG. BY: <i>A. Villar</i>	CHK. BY: MM
DWG. #:	DATE: NOV. 1995	FIGURE: 1.1

SOURCE:

AERIAL SURVEY DATED JUNE 1994 PREPARED
BY ROBINSON AERIAL SURVEY'S INC. FOR
CONESTOGA-ROVERS & ASSOCIATES

300131



THE
WHITMAN
Companies,
INC.

KLOCKNER & KLOCKNER PROPERTY
ROCKAWAY BOROUGH
MORRIS COUNTY, NJ

SITE MAP OF KLOCKNER PROPERTY

ORIG. BY: MM

DWG. BY: *A. Villar*

CHK. BY: MM

DWG.#:

DATE: NOV. 1995

FIGURE: 1.2

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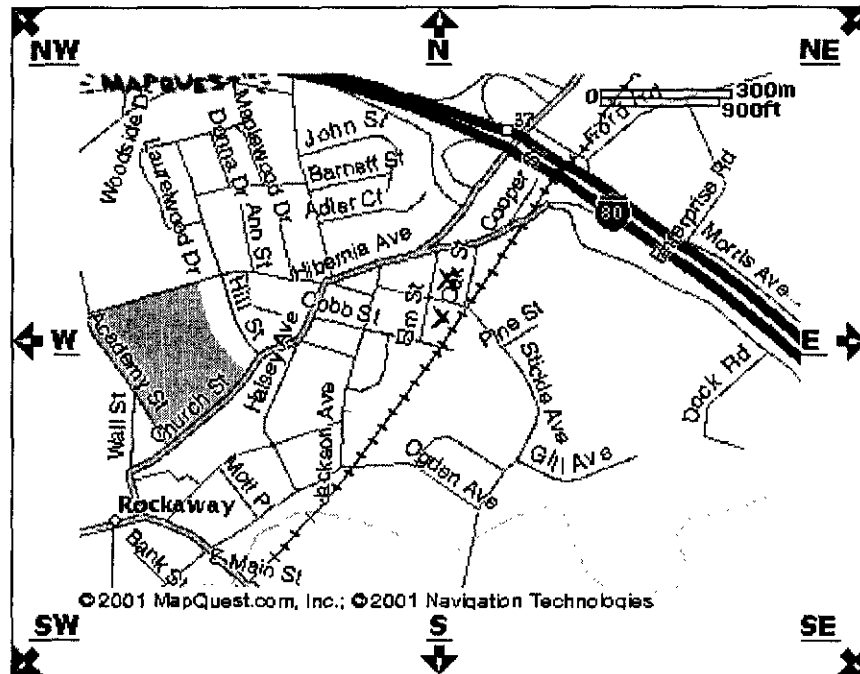


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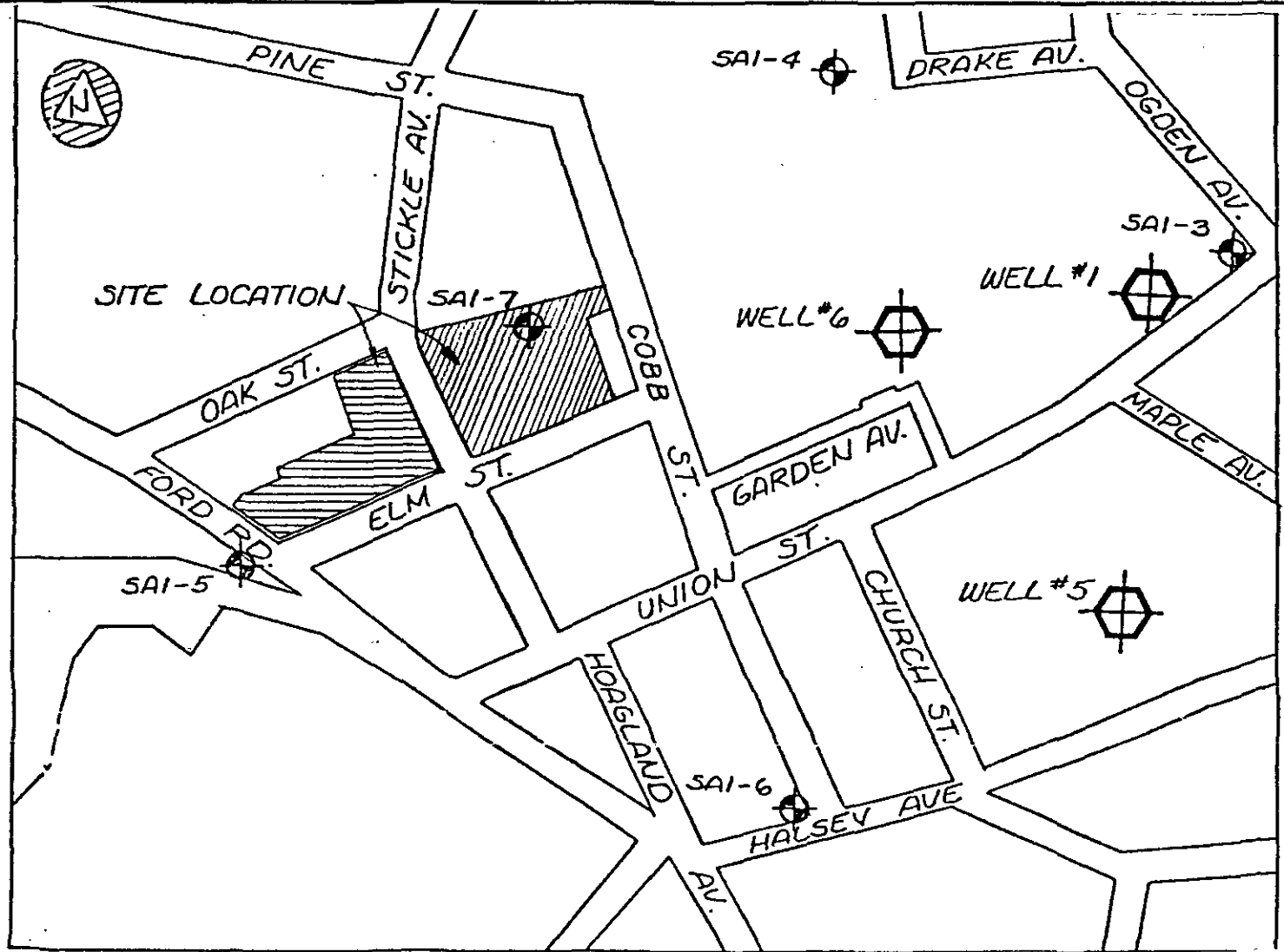
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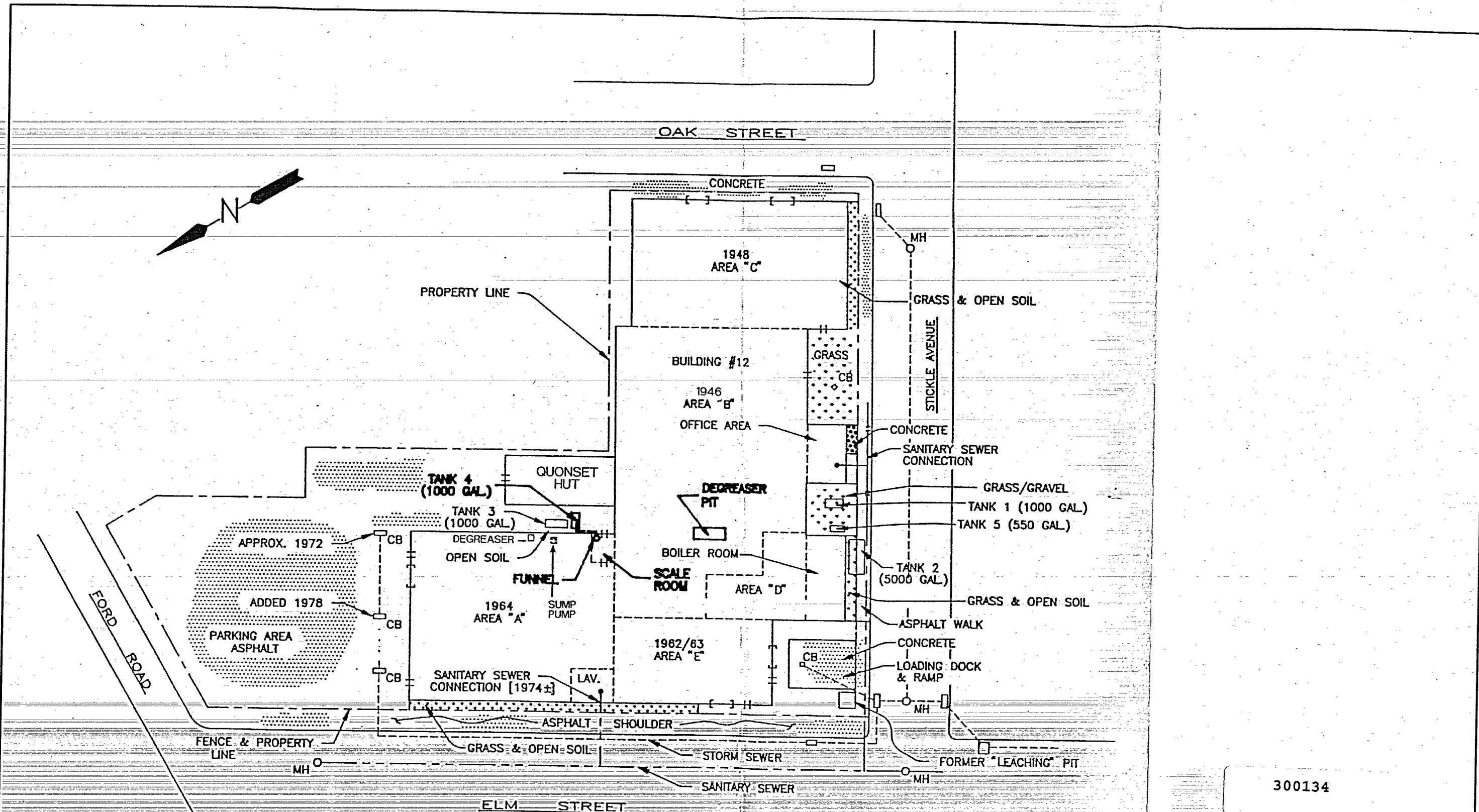


SCALE: 1"=300'

LEGEND
 NJDEP MONITORING WELL

SOURCE: FIRST ENVIRONMENT

 THE WHITMAN Companies, INC.	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	ROCKAWAY BOROUGH WELL LOCATION MAP	
ORIG. BY: MM	DWG. BY: <i>A. Villar</i>	CHK. BY: MM
DWG. #:	DATE: NOV. 1995	FIGURE: 1.3



NOTE: TANKS 1 THRU 5 HAVE BEEN REMOVED.

SOURCE: FIRST ENVIRONMENT

300134

NOT TO SCALE



KLOCKNER & KLOCKNER PROPERTY
ROCKAWAY BOROUGH
MORRIS COUNTY, NJ

SITE MAP BUILDING 12

ORIG. BY: MM

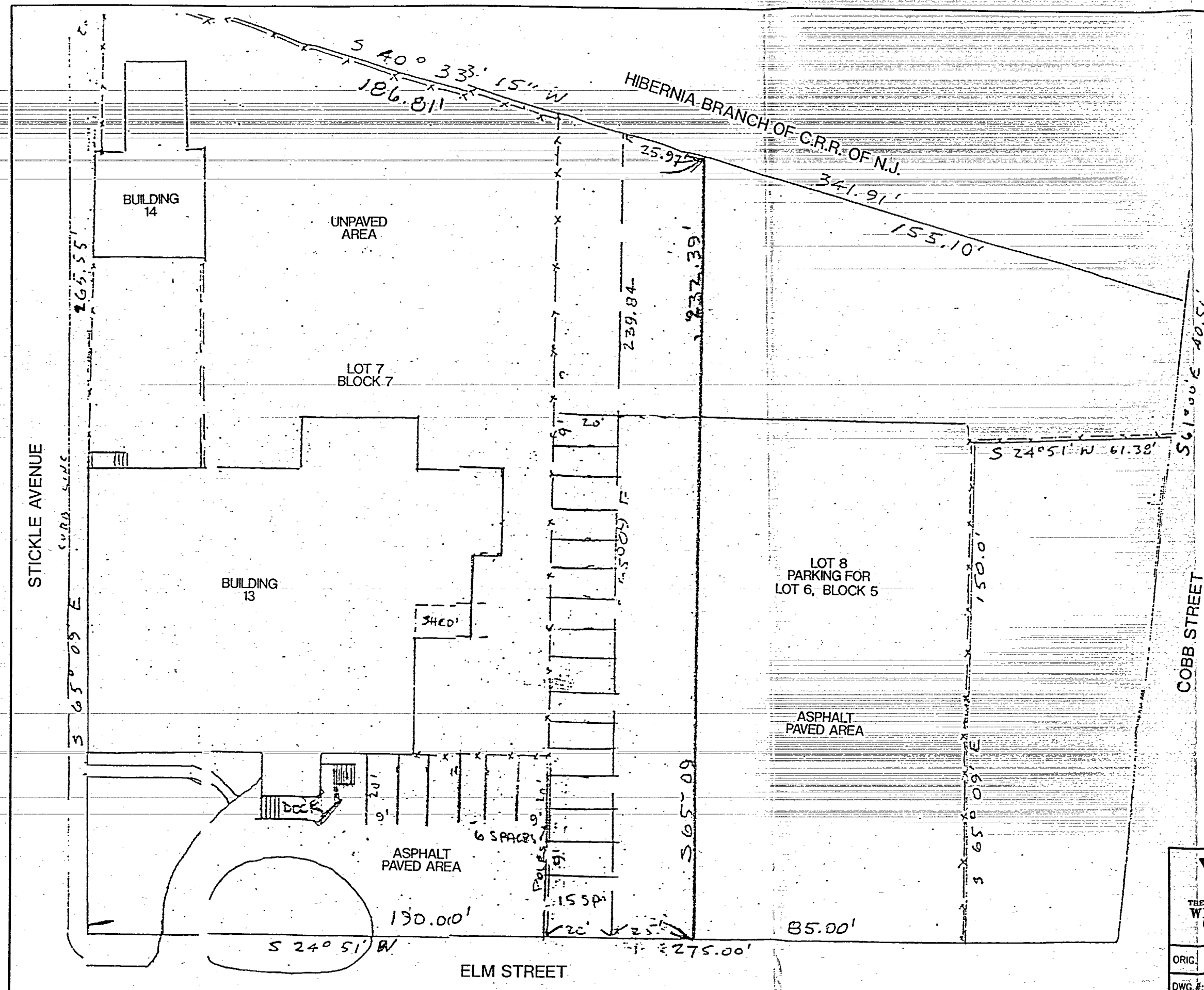
DWG. BY: A. Villar

CHK. BY: MM

DWG. #:

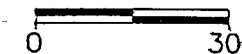
DATE: NOV. 1995

FIGURE: 2.1



300135

SCALE



KLOCKNER & KLOCKNER PROPERTY
ROCKAWAY BOROUGH
MORRIS COUNTY, NJ

SITE MAP BUILDING 13

ORIG. BY: MM

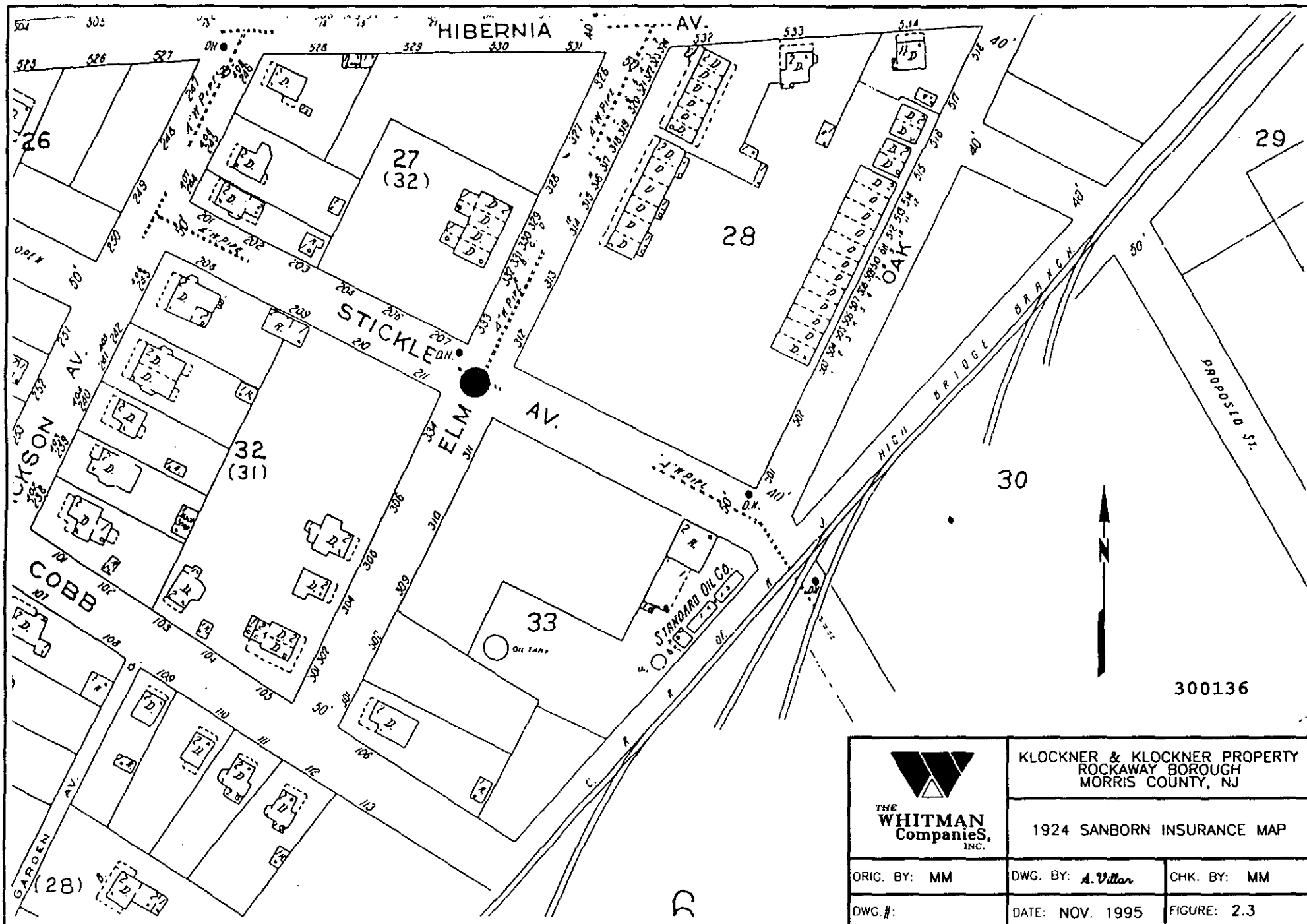
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CHK. BY: MM

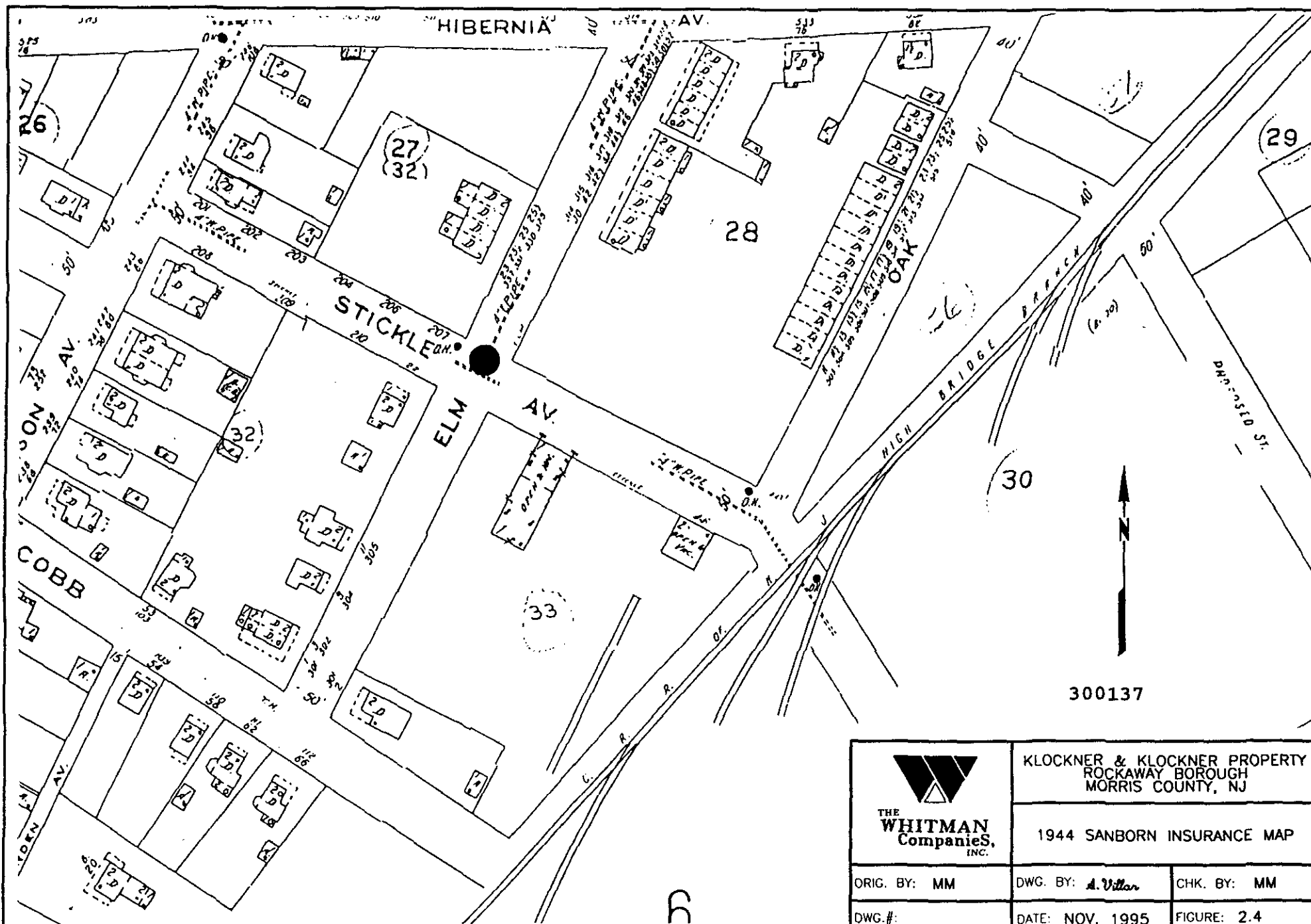
DWG.#:


DATE: NOV. 1995

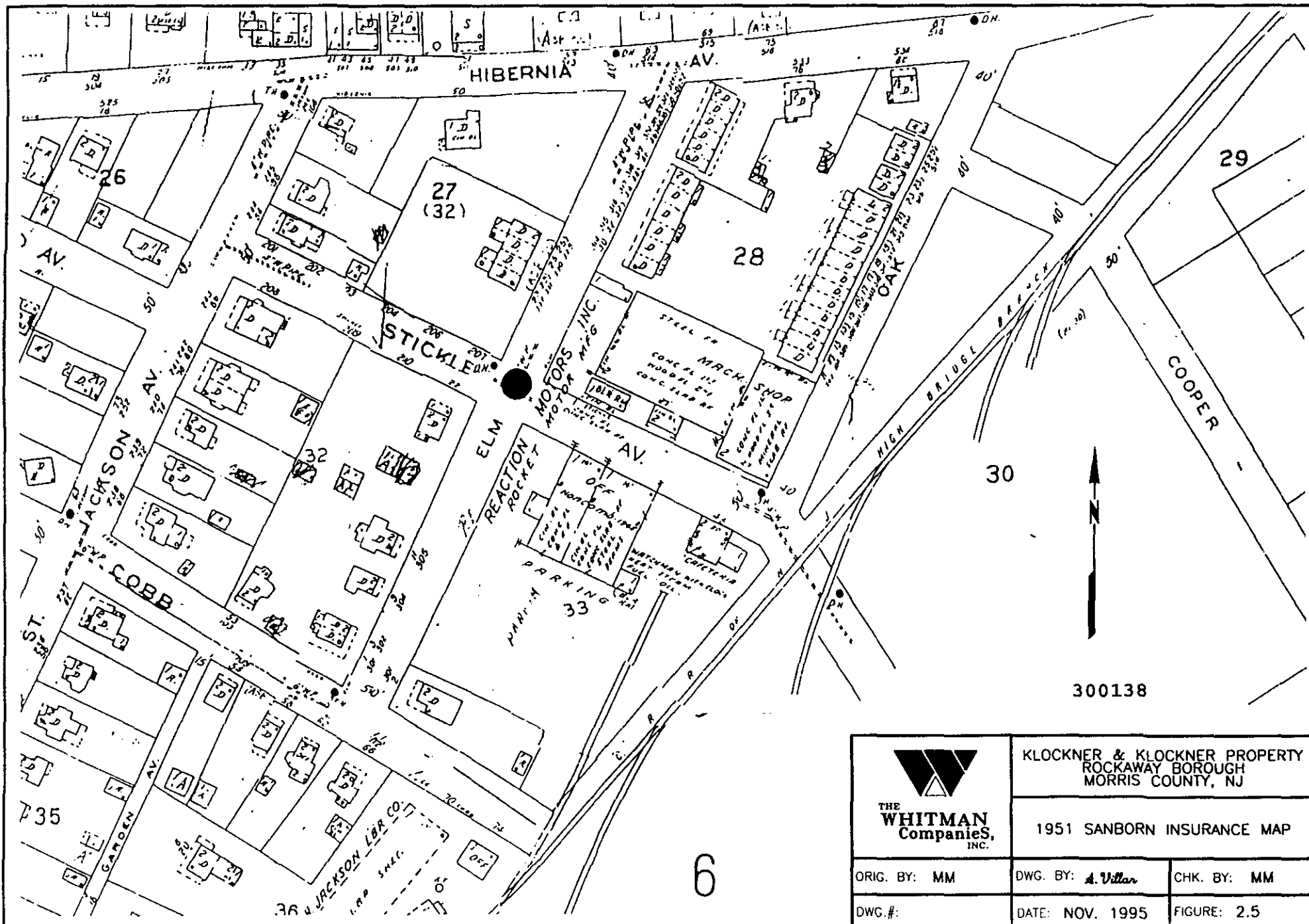
FIGURE: 2.2




	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	1924 SANBORN INSURANCE MAP	
ORIG. BY: MM	DWG. BY: A. Villar	CHK. BY: MM
DWG. #:	DATE: NOV. 1995	FIGURE: 2.3



 THE WHITMAN Companies, INC.	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	1944 SANBORN INSURANCE MAP	
ORIG. BY: MM	DWG. BY: <i>A. Villar</i>	CHK. BY: MM
DWG. #:	DATE: NOV. 1995	FIGURE: 2.4




	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	1951 SANBORN INSURANCE MAP	
ORIG. BY: MM	DWG. BY: A. Villar	CHK. BY: MM
DWG. #:	DATE: NOV. 1995	FIGURE: 2.5




SITE

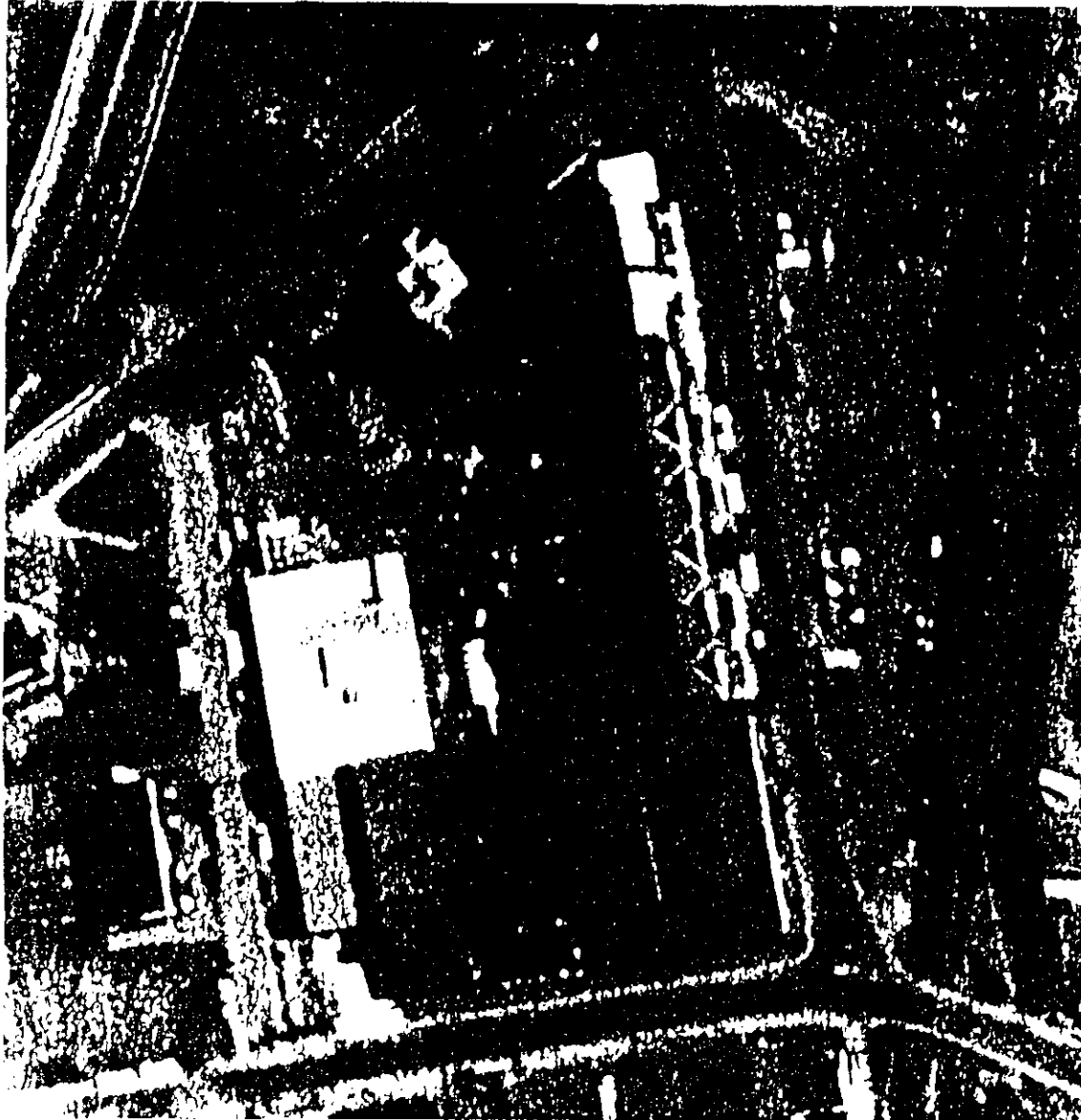
300139

 THE WHITMAN Companies, INC.	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	1940 AERIAL PHOTOGRAPH	
BY MM	DWG BY <i>A. Vittor</i>	CHK BY MM
DATE	NOV. 1995	SHEET 26




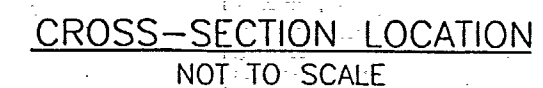
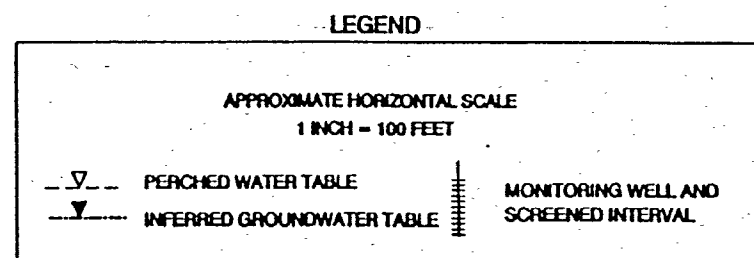
300140

 THE WHITMAN Companies, INC.	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	1951 AERIAL PHOTOGRAPH	
DRG BY MM	DWG BY <i>A. Vittor</i>	CHK BY MM
Rev. 1	DATE NOV. 1995	FIGURE 2.7




300141

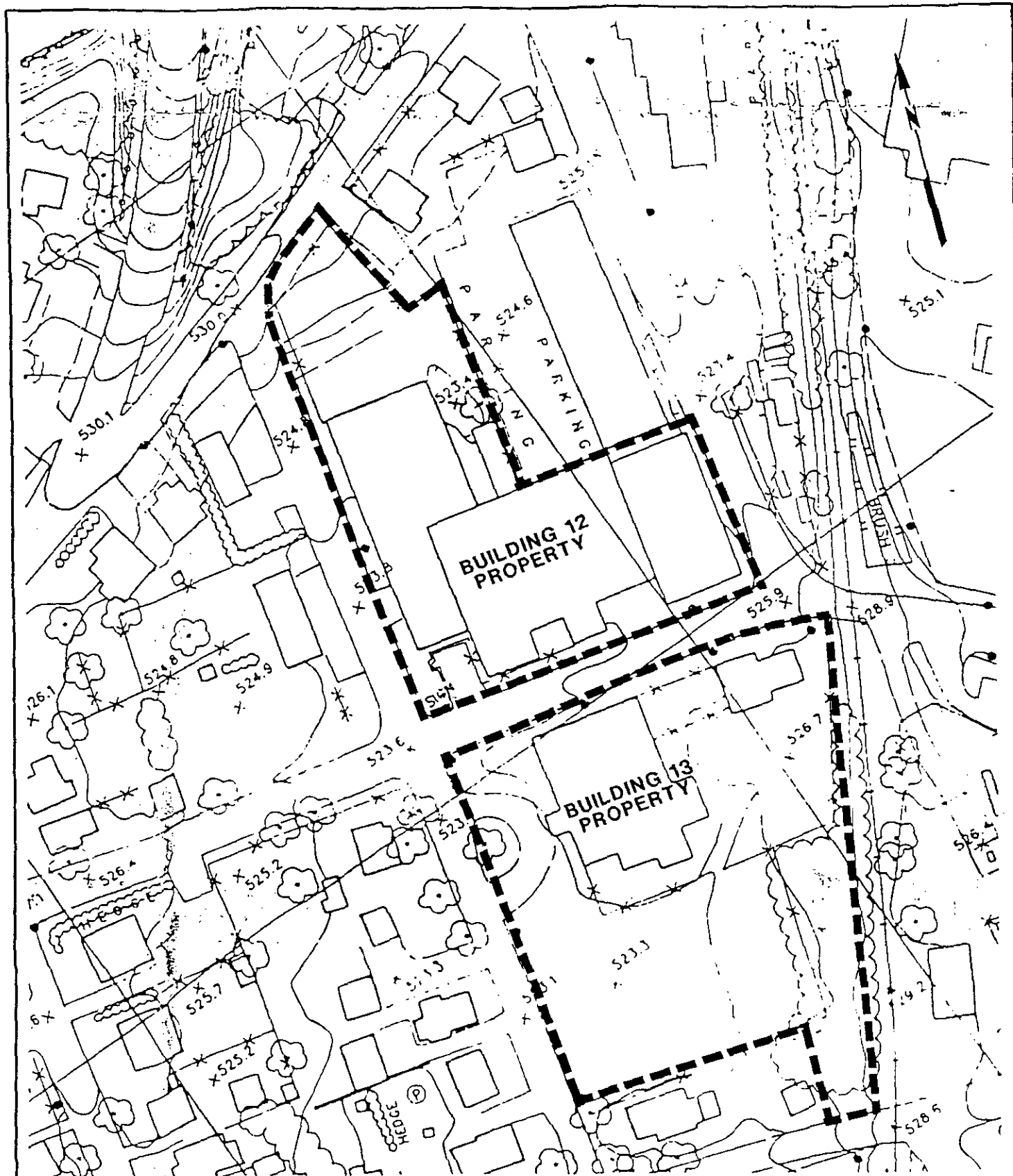
	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	1966 AERIAL PHOTOGRAPH	
ORIG BY: MM	DWG BY: <i>A. Villar</i>	CHK BY: MM



300142

SOURCE: ICM, 1991.

 THE WHITMAN Companies, INC.	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	GEOLOGIC AND HYDROGEOLOGIC CROSS SECTION	
ORIG. BY: MM	DWG. BY: <i>A. Villar</i>	CHK. BY: MM
DWG. #:	DATE: NOV. 1995	FIGURE: 2.9



SOURCE:

300144

AERIAL SURVEY DATED JUNE 1994 PREPARED
BY ROBINSON AERIAL SURVEY'S INC. FOR
CONESTOGA-ROVERS & ASSOCIATES



KLOCKNER & KLOCKNER PROPERTY
ROCKAWAY BOROUGH
MORRIS COUNTY, NJ

SITE MAP OF
KLOCKNER PROPERTY

ORIG. BY: MM

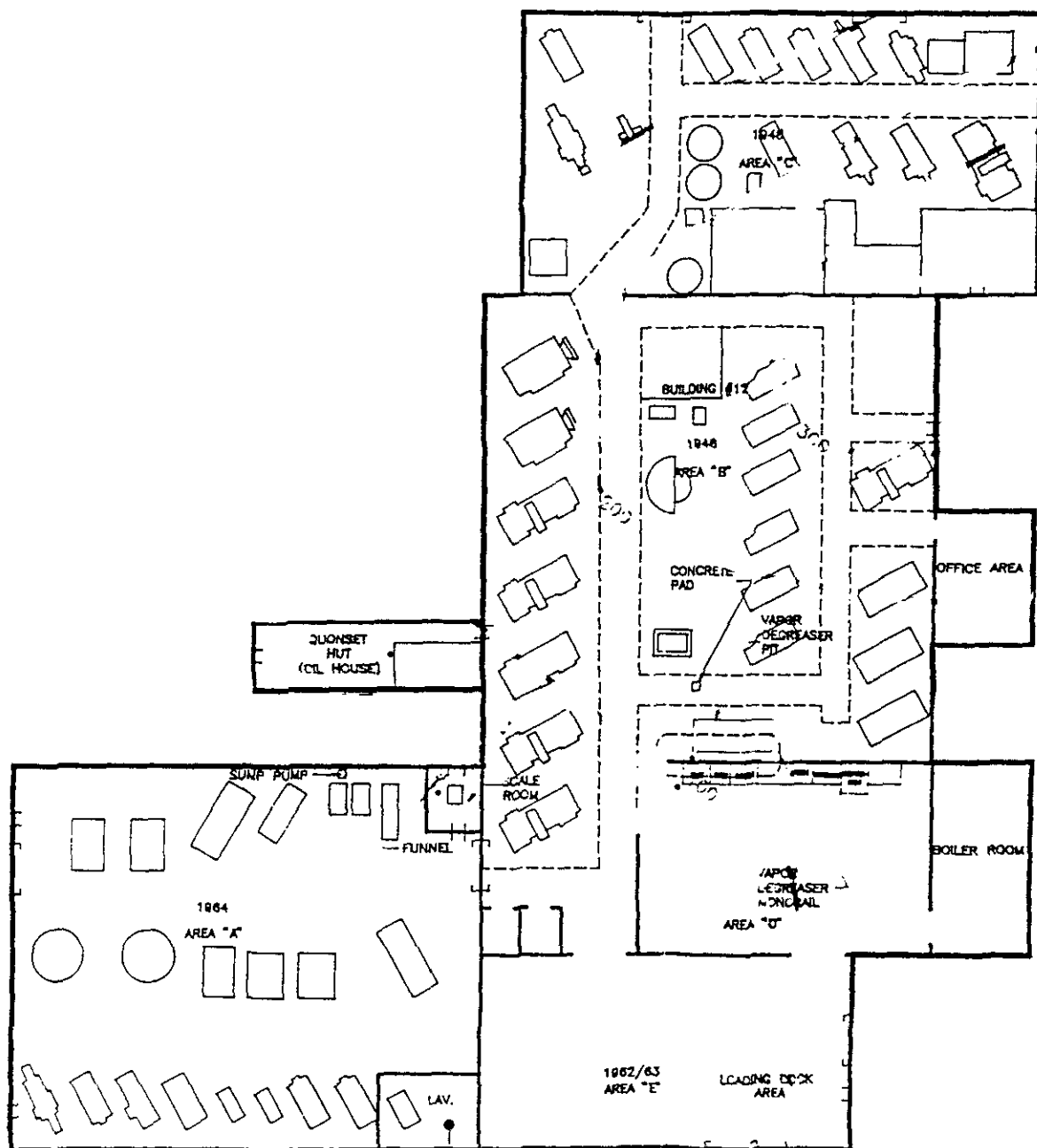
DWG. BY: A. Ullar

CHK. BY: MM

DWG. #:

DATE: NOV 1995


FIGURE: 31

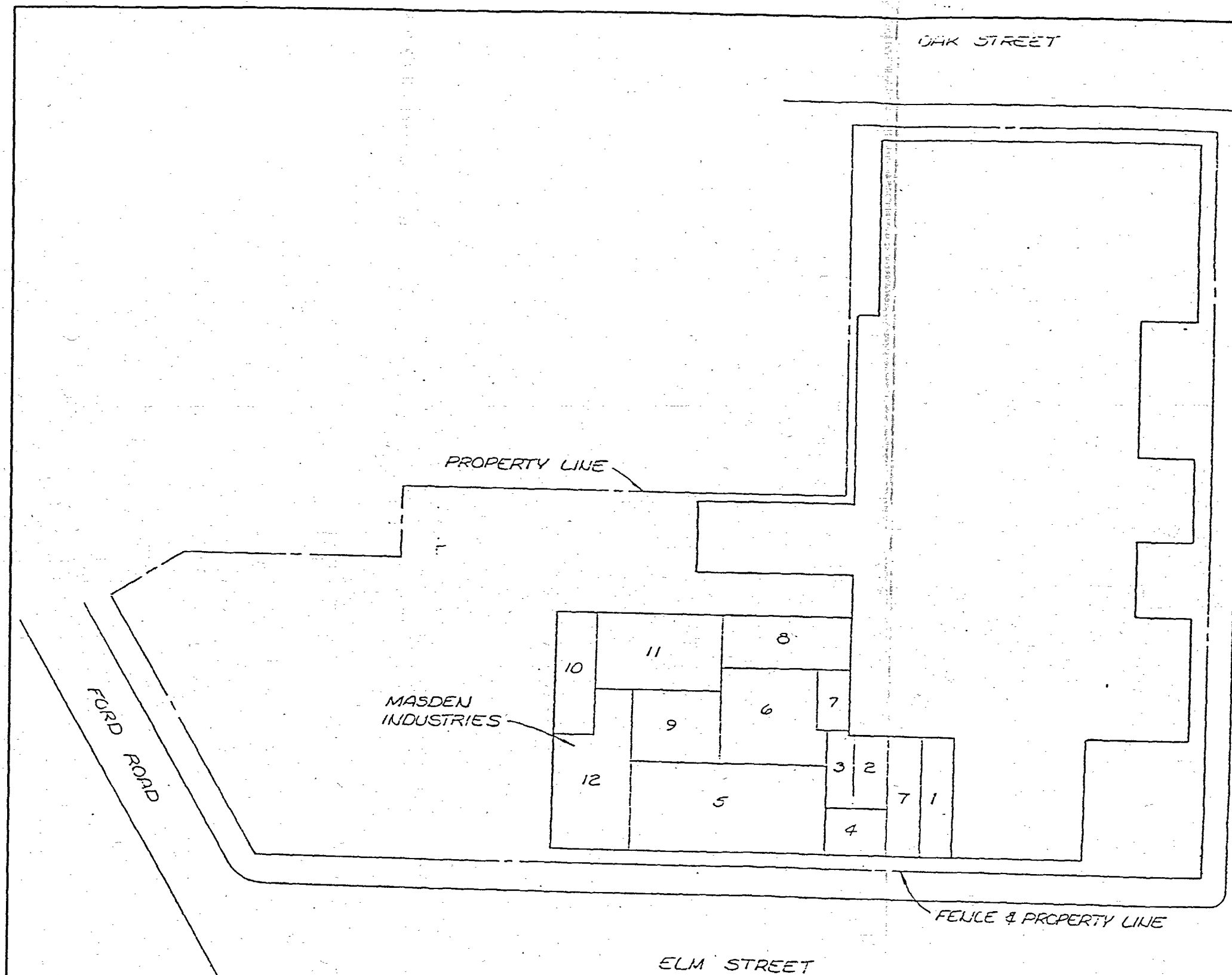


300145

NOT TO SCALE

SOURCE: FIRST ENVIRONMENT


 THE WHITMAN Companies, INC.	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	THIOKOL'S OPERATIONS BUILDING 12	
ORIG. BY: MM	DWG. BY: <i>A. Villar</i>	CHK. BY: MM
DWG. #:	DATE: NOV. 1995	FIGURE: 3.2

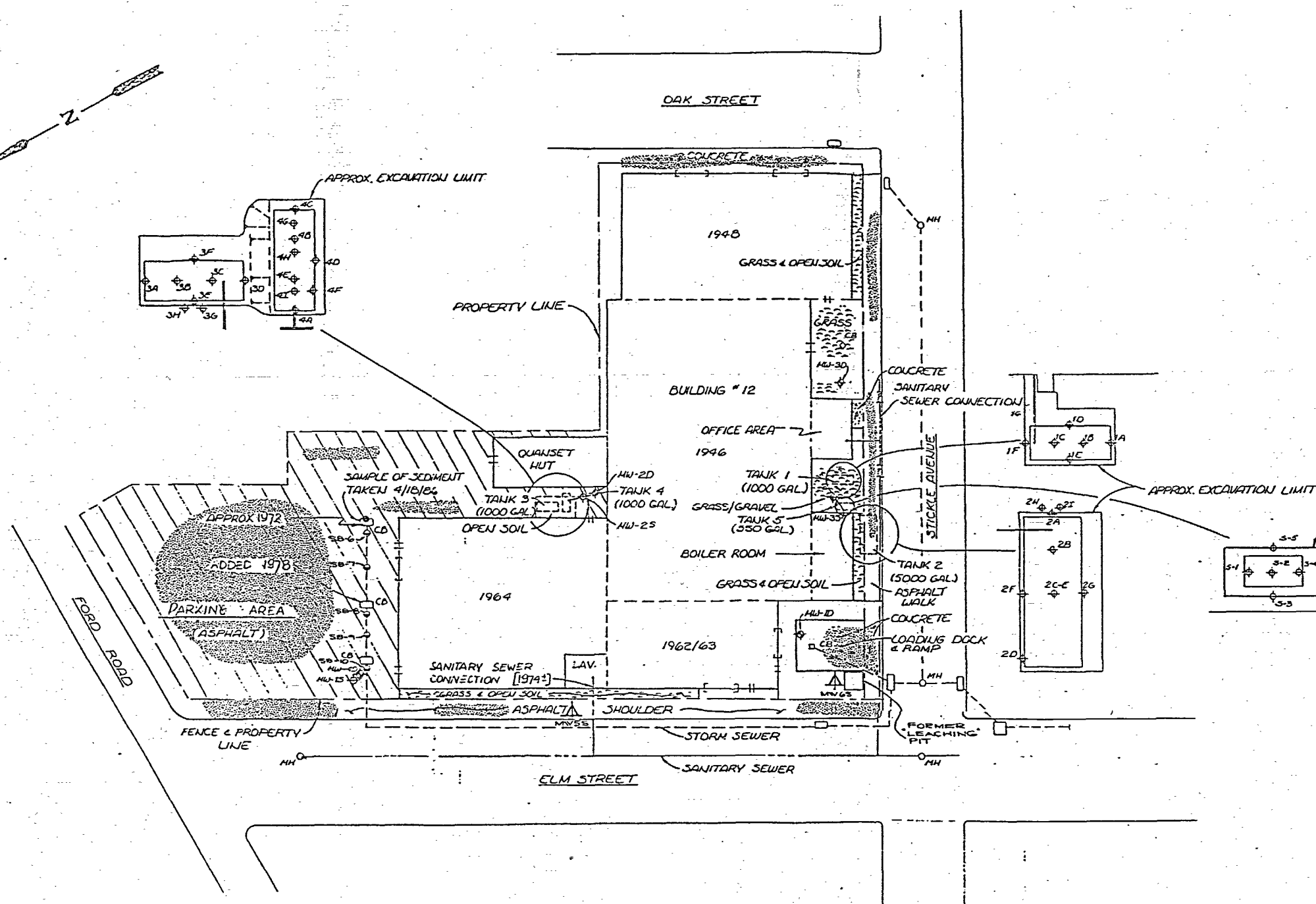
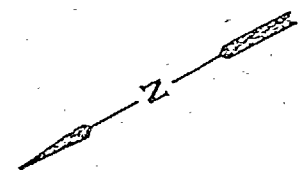


AREA	OPERATIONS
1	Graphite Machining
2	Glass Powder Pressing
3	Glass Pill Oven
4	Machine Shop
5	Wire Forming
6	Heat Treatment & Glass Sealing
7	Tube Filling
8	Bulb Sealing
9	Glass Ampules
10	Shipping and Receiving
11	Quality Control
12	Office

300146

SOURCE: GROUND/WATER TECHNOLOGY, INC.

 THE WHITMAN Companies, INC.	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	MASHEN INDUSTRIES OPERATIONS BUILDING 12, AREA A	
ORIG. BY: MM	DWG. BY: A. Villar	CHK. BY: MM
DWG. #:	DATE: NOV. 1995	FIGURE: 3.3



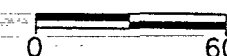
NOTE: TANKS 1 THRU 5 HAVE BEEN REMOVED

LEGEND


- EXISTING DEEP MONITOR WELL
- EXISTING SHALLOW MONITOR WELL
- POST EXCAVATION SOIL SAMPLES
- ▲ PROPOSED SHALLOW MONITORING WELL
- PROPOSED POST EXCAVATION SOIL SAMPLE

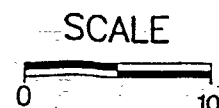
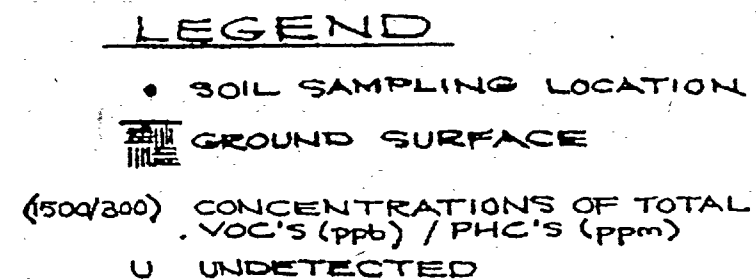
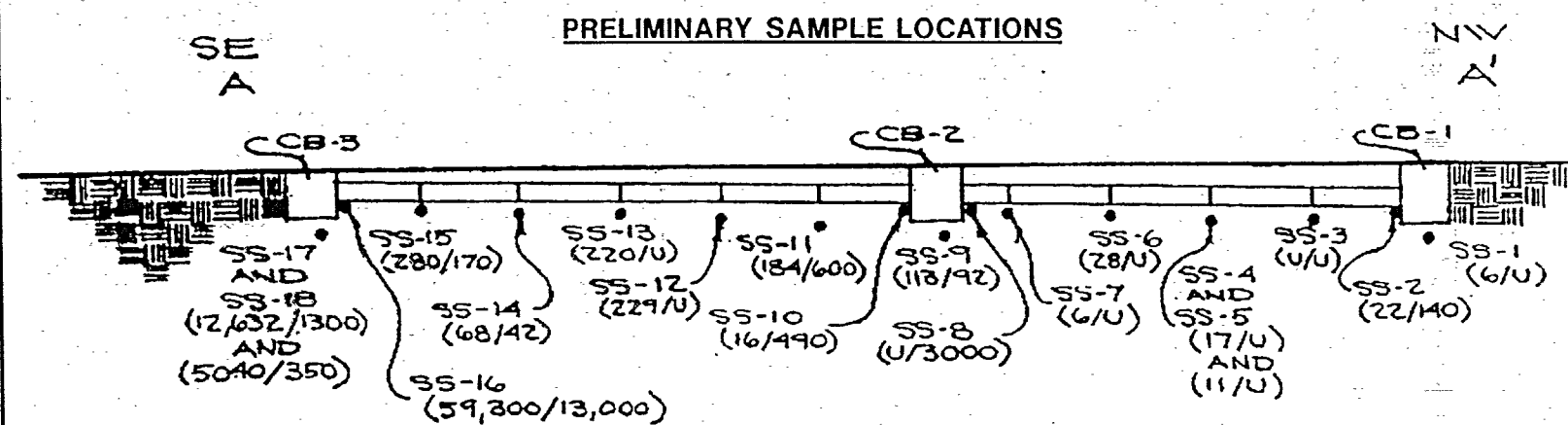
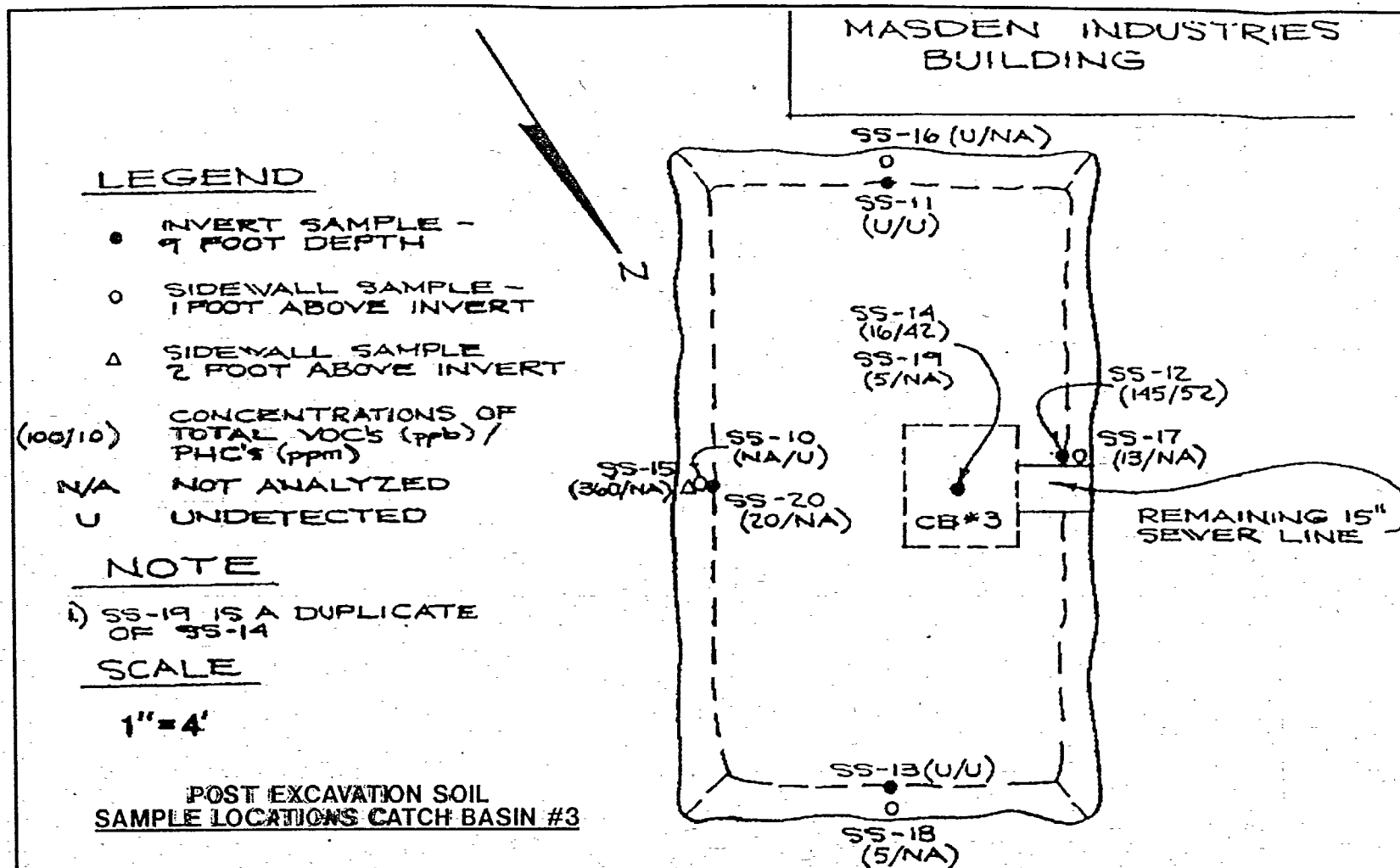
300147

SCALE

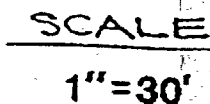
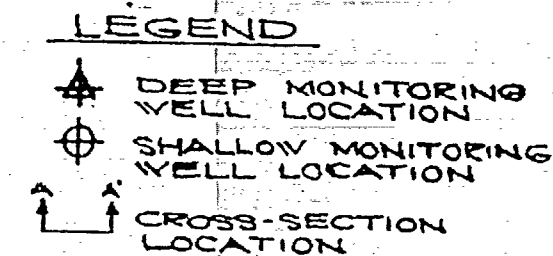
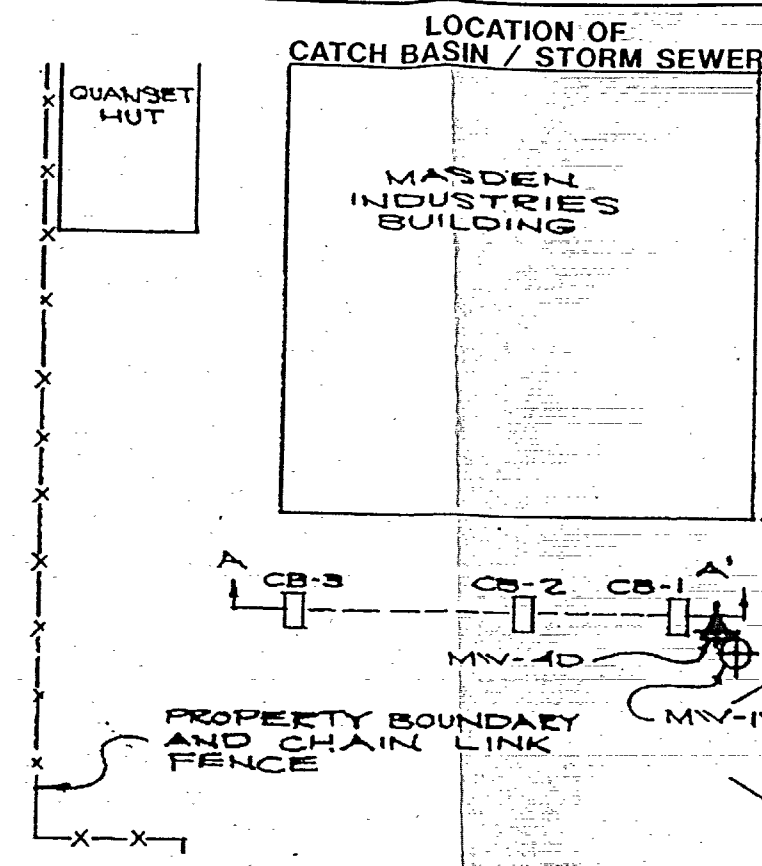


SOURCE: FIRST ENVIRONMENT

 THE WHITMAN Companies, INC.	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	UNDERGROUND STORAGE TANKS SAMPLE LOCATIONS	
ORIG. BY: MM	DWG. BY: A. Vitar	CHK. BY: MM
DWG. #:	DATE: NOV. 1995	FIGURE: 3.4



SOURCE: FIRST ENVIRONMENT



300148

	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ		
	CATCH BASIN / STORM SEWER SAMPLE & EXCAVATION LOCATIONS		
ORIG. BY: MM	DWG. BY: A. Villar	CHK. BY: MM	
DWG. #:	DATE: NOV. 1995	FIGURE: 3.5	

STICKLE AVENUE

CHAIN LINK FENCE

2" GAS LINE

LOADING DOCK

CONCRETE/CINDER-BLOCK RETAINING WALL

SCALE: NOT TO SCALE

LEGEND:

- INVERT SAMPLE
12.5 FOOT DEPTH
- SIDEWALL SAMPLE
1 FOOT ABOVE
INVERT
- △ SIDEWALL SAMPLE
5 FEET ABOVE
INVERT
- (10) CONCENTRATIONS OF
TOTAL VOC's (ppb)
- U UNDETECTED



EXCAVATION


SEWER LINE

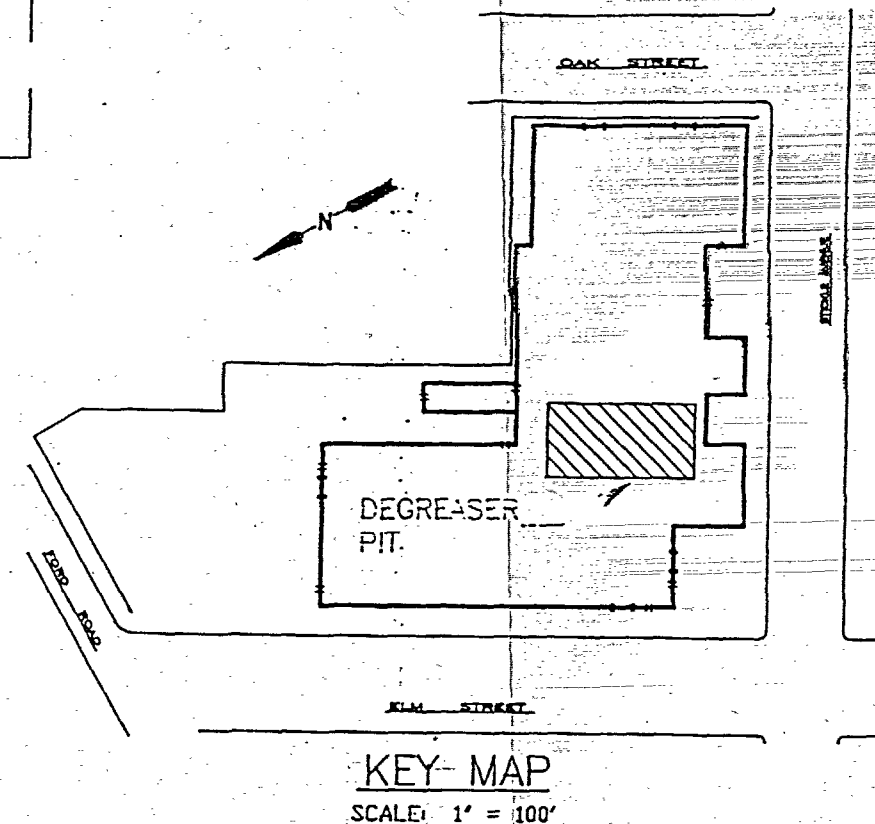
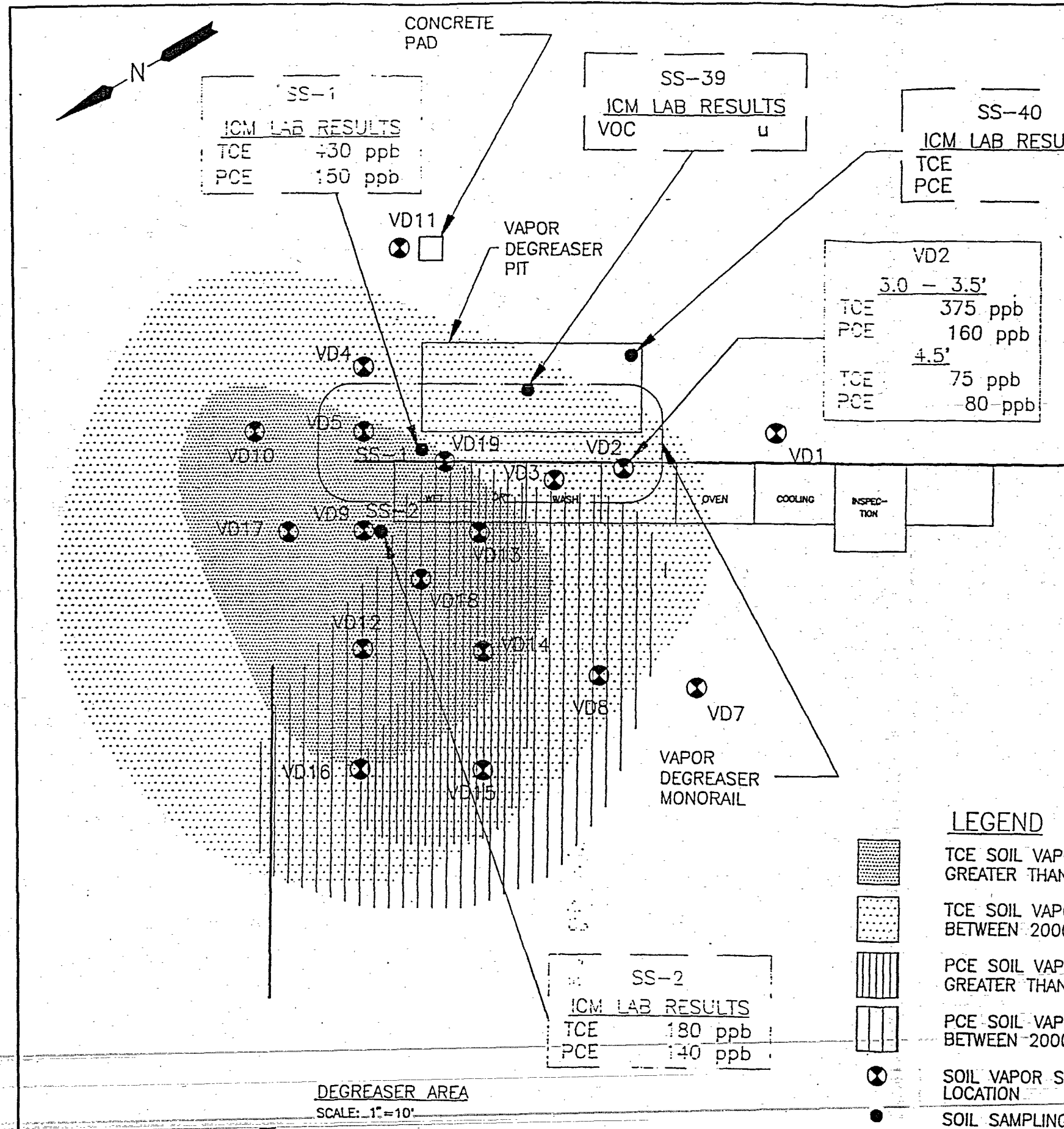
MIV-65

ELM STREET

300149

SOURCE: FIRST ENVIRONMENT

 <p>THE WHITMAN Companies, INC.</p>	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	LEACHING PIT POST EXCAVATION SOIL SAMPLE LOCATIONS	
ORIG. BY: MM	DWG. BY: A. Villar	CHK. BY: MM
DWG. #:	DATE: NOV. 1995	FIGURE: 3.6



NOTE: FIELD SCREEN RESULTS WITH PHOTVAC 10s50 OR 10s70 IN ACCORDANCE WITH NJDEP "FIELD DELINEATION OF VOLATILE CONTAMINATION USING AMBIENT TEMPERATURE ANALYSIS."

300150

		KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
		DEGREASER PIT SAMPLE LOCATIONS	
ORIG. BY:	MM	DWG. BY:	A. Villar
DWG. #:		CHK. BY:	MM
		DATE:	NOV. 1995
		FIGURE:	37

SOURCE: FIRST ENVIRONMENT

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REVIEW AT THE U.S. EPA SUPERFUND RECORDS CENTER, 290
BROADWAY, 18TH FLOOR, NEW YORK, NY 10007

1. 100

UNPAVED SURFACE




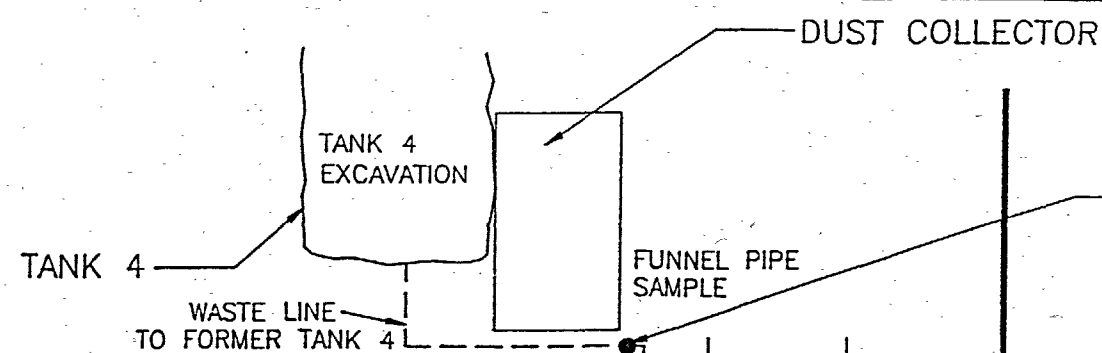
ASPHALT WITH ALUMINUM SHAVINGS

NOTE: FIELD SCREEN RESULTS WITH PHEOVAC 10s50 OR 10s70
IN ACCORDANCE WITH SUPERFUND PART 111 AREA OF VOLATILE CONTAMINATION
USING AMERICAN OVERSEAS INSTRUMENT COMPANY, INC. "S"

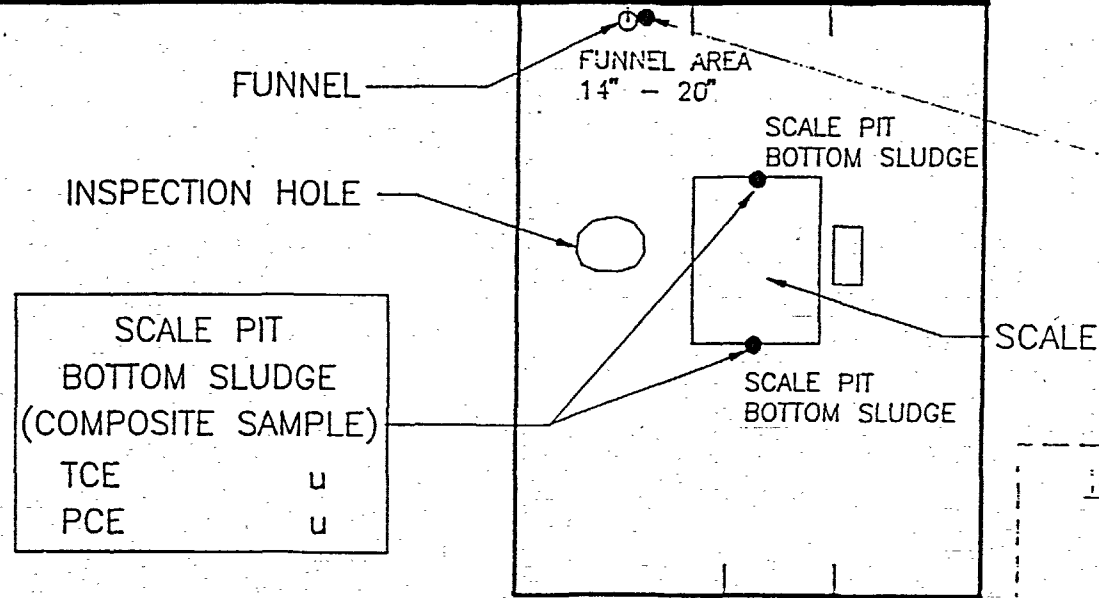
300151

SOURCE: FIRST ENVIRONMENT

 THE WHITMAN Companies, Inc.	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	ALLEYWAY SAMPLE LOCATIONS	
	DATE: 11/11/81 BY: J.M.M.	DATE: 11/11/81 BY: J.M.M.



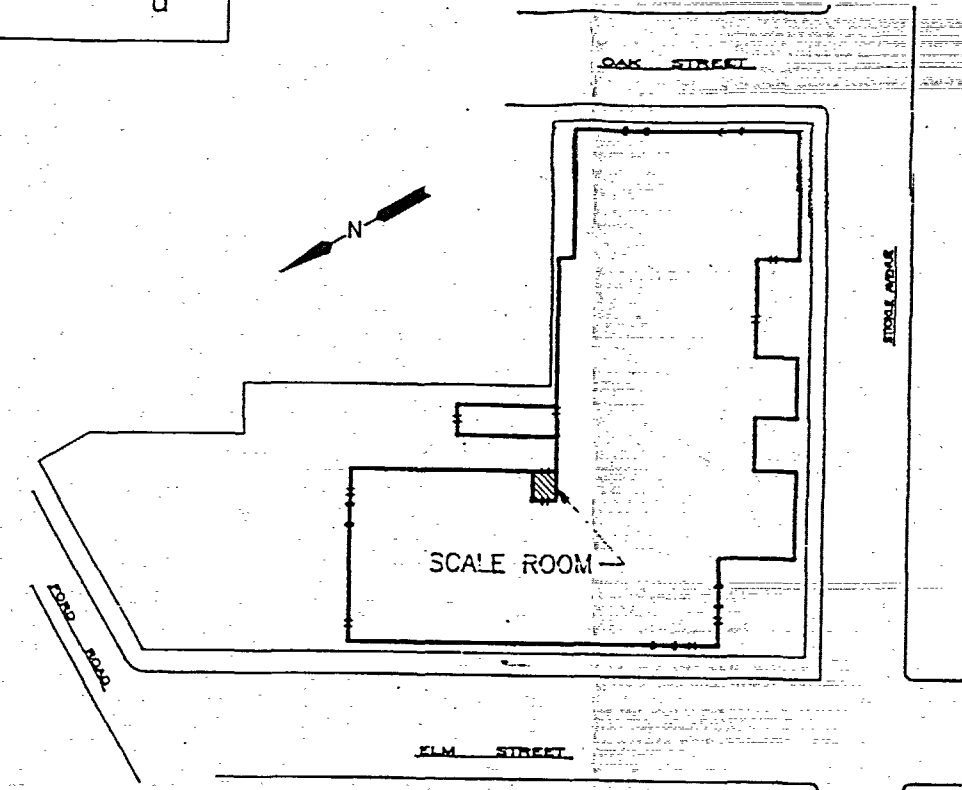
FUNNEL PIPE SAMPLE	
TCE	u
PCE	u



SCALE PIT BOTTOM SLUDGE (COMPOSITE SAMPLE)	
TCE	u
PCE	u

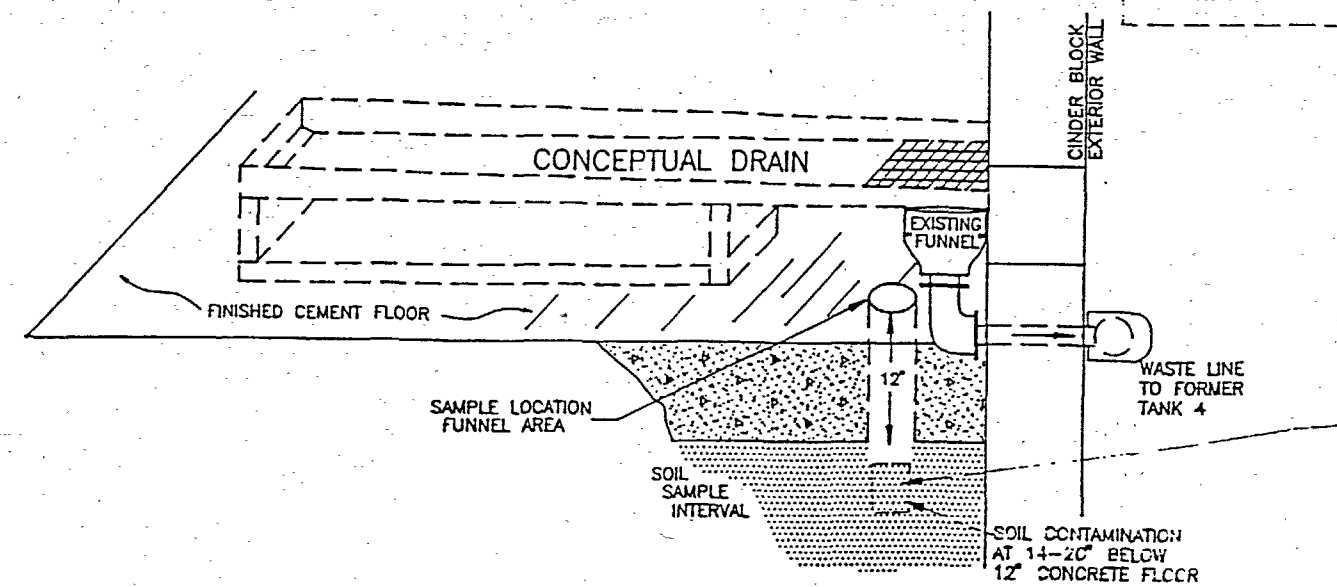
SCALE ROOM
SCALE: 1" = 5'

ICM LAB RESULTS	
FUNNEL AREA 14" - 20"	
TCE	16,000 ppb
PCE	12 ppb
T-1,2-DCE	1,100 ppb



KEY MAP
SCALE: 1" = 100'

NOTE: FIELD SCREENING RESULTS WITH PHOTOVAC 10s50 OR 10s70 IN ACCORDANCE WITH NJDEP "FIELD DELINEATION OF VOLATILE CONTAMINATION USING AMBIENT TEMPERATURE HEADSPACE ANALYSIS."



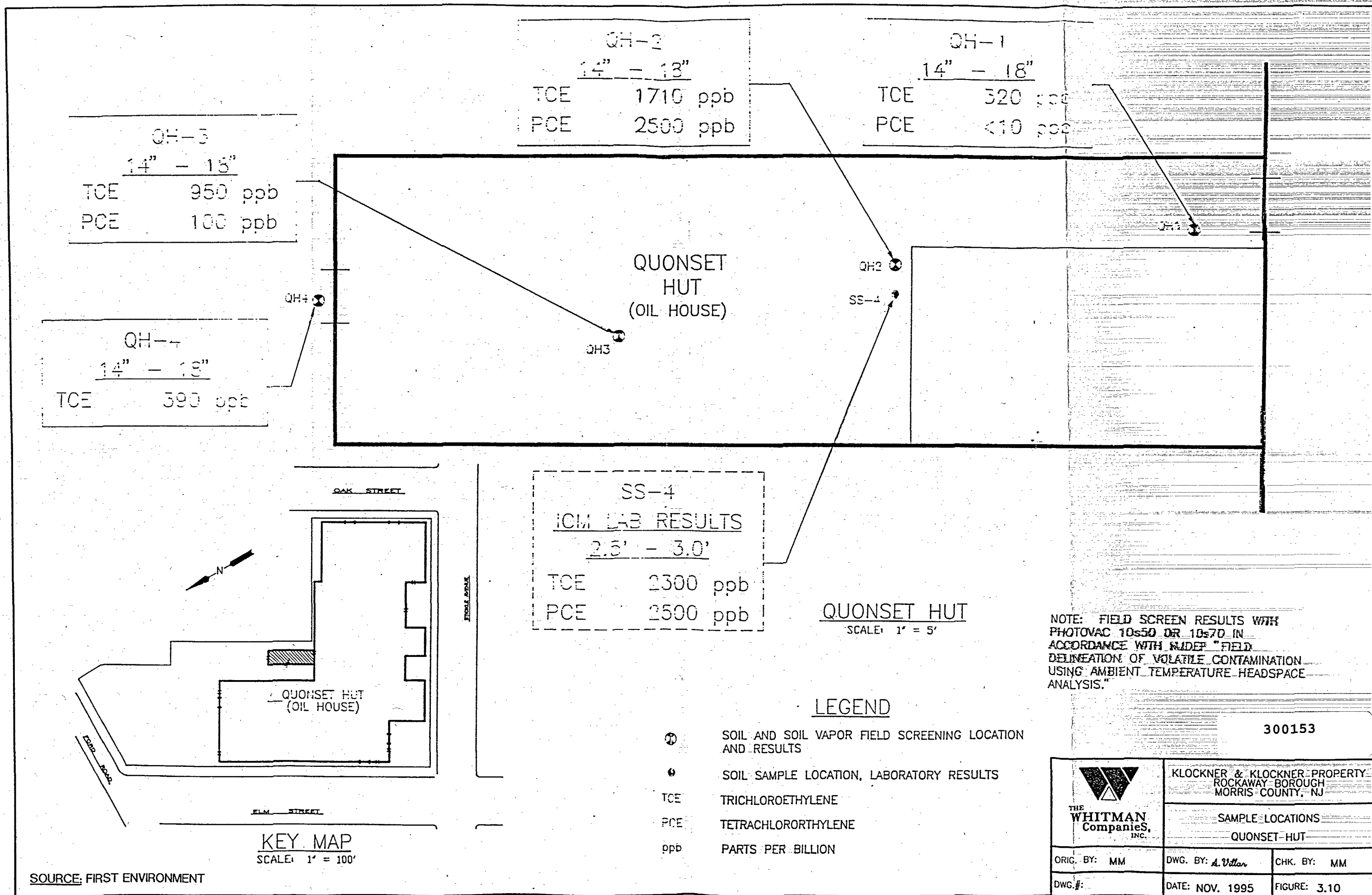
CROSS SECTION VIEW
SCALE: NTS

LEGEND

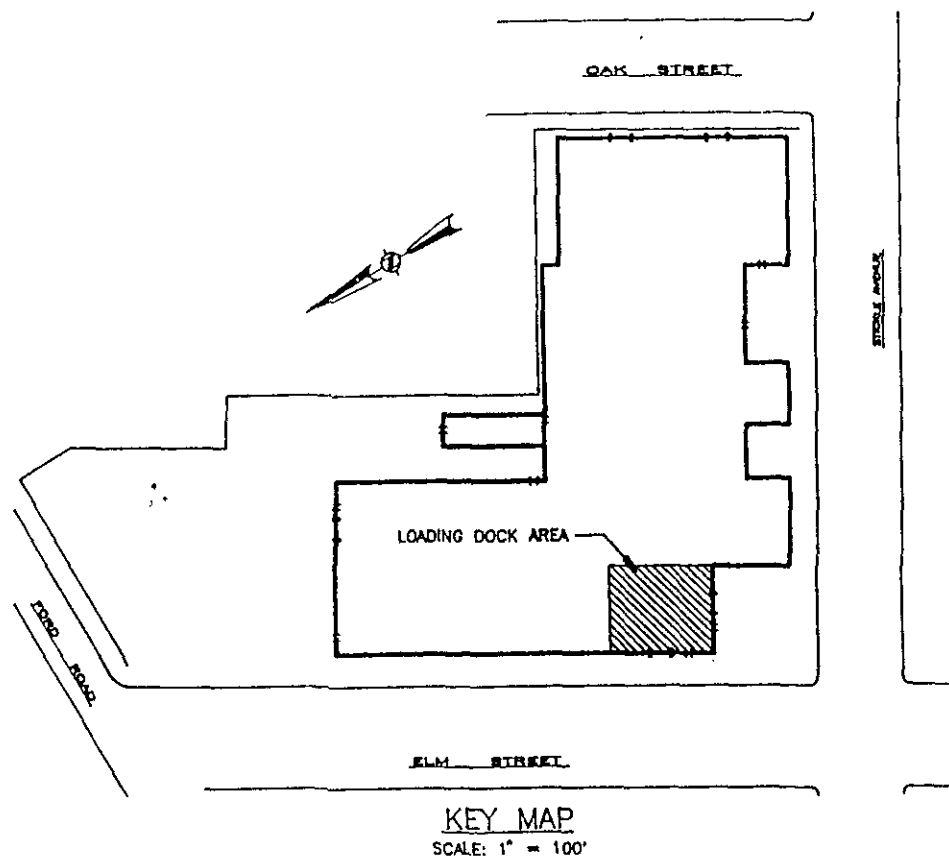
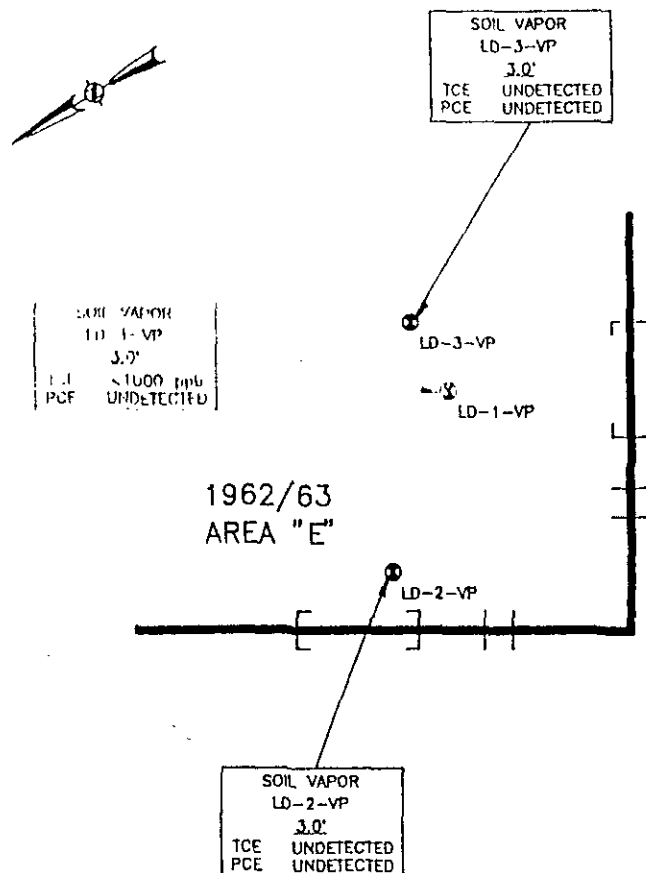
- SAMPLE LOCATION
- TCE TRICHLOROETHYLENE
- PCE TETRACHLOROETHYLENE
- T-1,2-DCE TOTAL 1,2-DICHLOROETHYLENE
- ppb PARTS PER BILLION
- u UNDETECTED

SOURCE: FIRST ENVIRONMENT

			300152		
THE WHITMAN Companies, INC.			KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ		
ORIG. BY: MM			SAMPLE LOCATIONS SCALE ROOM		
DWG. #:			DATE: NOV. 1995		
DWG. BY: A. Villar			CHK. BY: MM		
FIGURE: 3.9					



SOURCE: FIRST ENVIRONMENT




LOADING DOCK
SCALE: 1" = 20'

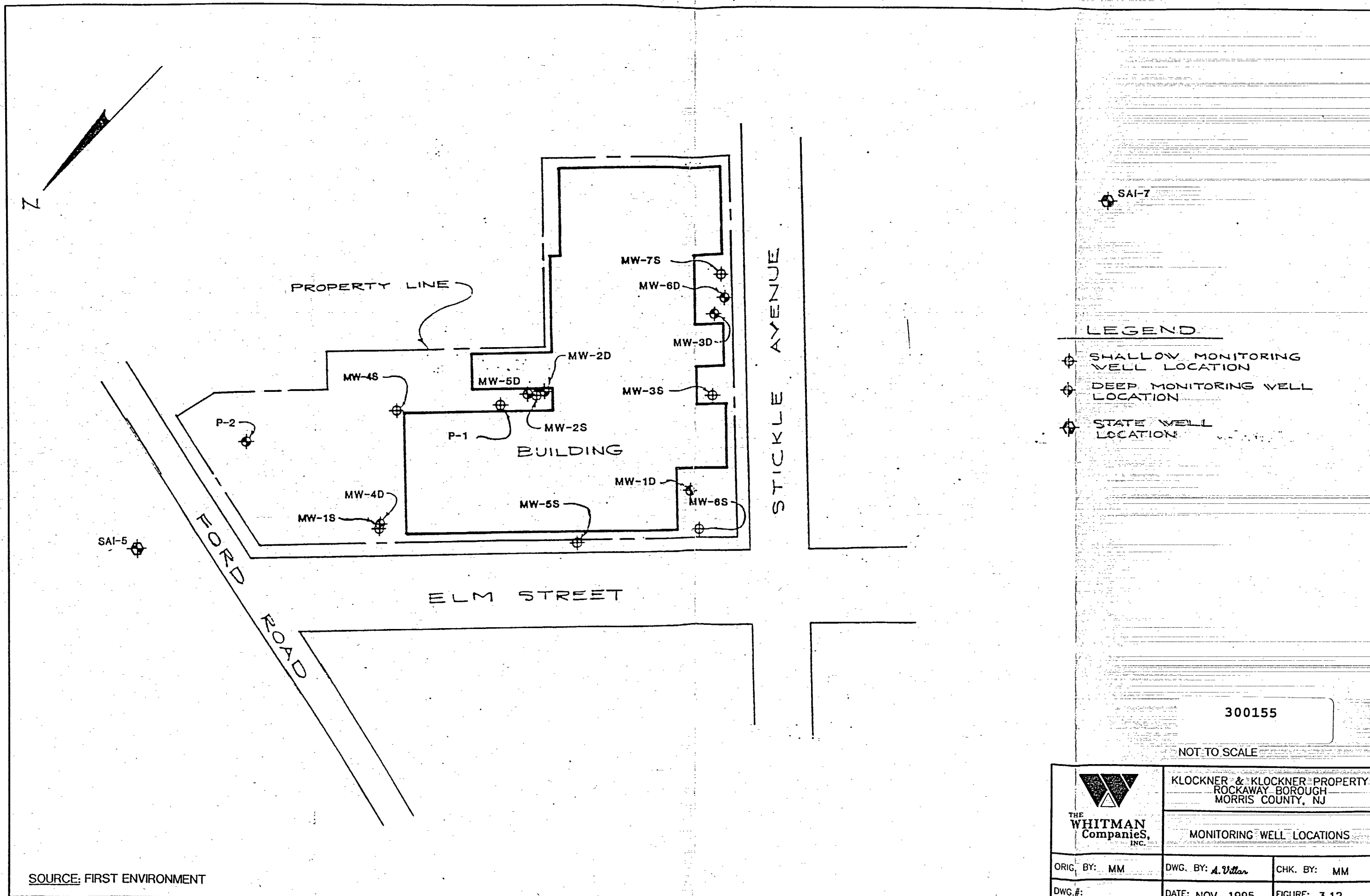
NOTE: FIELD SCREEN RESULTS WITH PHOTOVAC 10s50 OR 10s70 IN ACCORDANCE WITH NJDEP "FIELD DELINEATION OF VOLATILE CONTAMINATION USING AMBIENT TEMPERATURE HEADSPACE ANALYSIS."

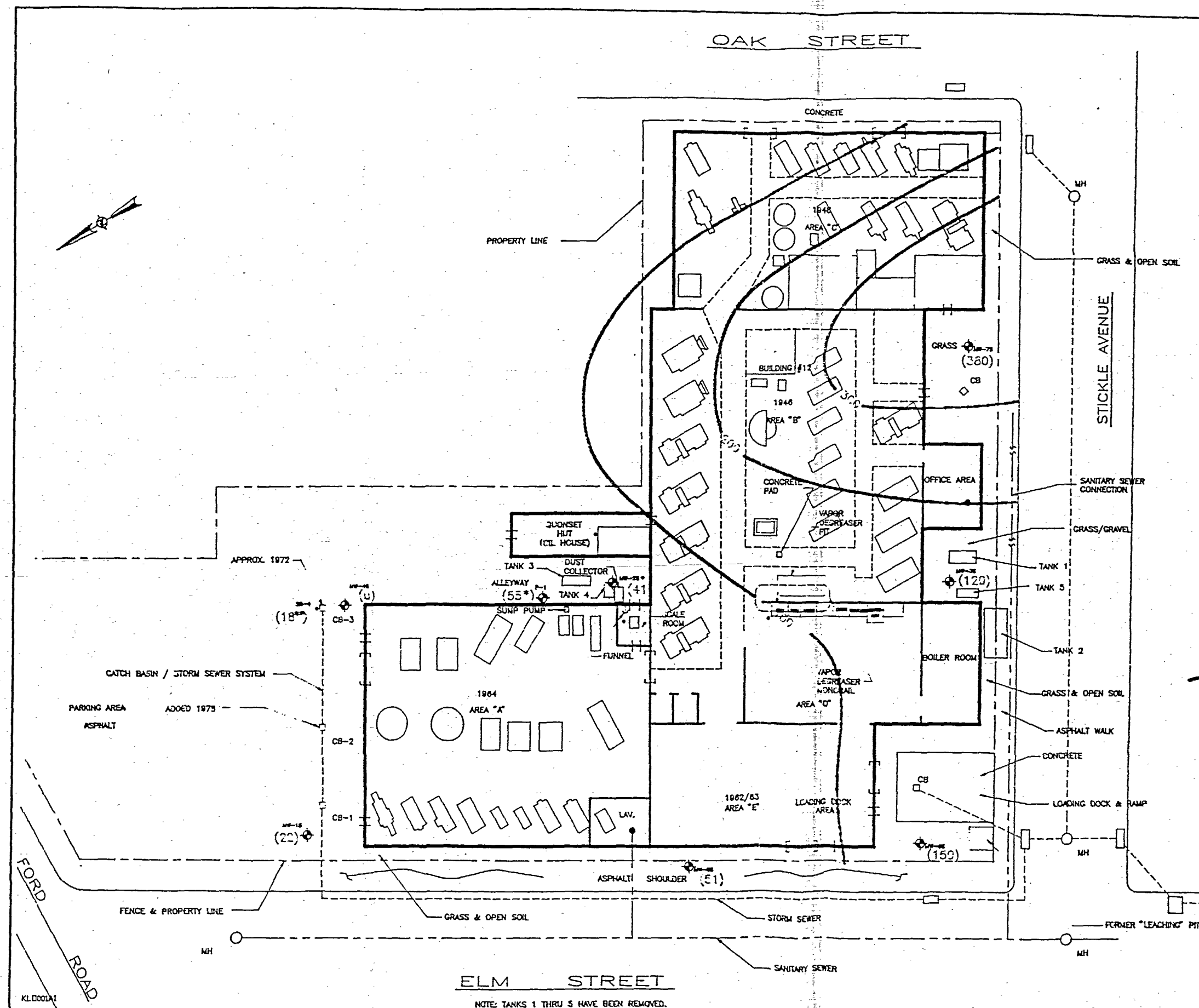
300154

LEGEND

- ① SOIL AND SOIL VAPOR FIELD SCREENING LOCATION AND RESULTS
- TCE TRICHLOROETHYLENE
- PCE TETRACHLOROETHYLENE
- ppb PARTS PER BILLION

			KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ		
			SAMPLE LOCATIONS LOADING DOCK		
ORIG. BY: MM		DWG. BY: A. Villar		CHK. BY: MM	
DWG. #:		DATE: NOV. 1995		FIGURE: 3.11	





LEGEND

MONITORING WELL LOCATION

ISOCONCENTRATION LINE FOR PCE

NUMBER IN MAXIMUM CONCENTRATION OF PCE IN PARTS PER BILLION

FIELD SCREEN RESULTS WITH PHOTOMAC 10-50 OR 10-70 IN ACCORDANCE WITH NJDEP FIELD DEGREASER OF VOLATILE CONTAMINATION USING AMBIENT TEMPERATURE HEADSPACE ANALYSIS

SATURATED SOIL SAMPLE BELOW WATER TABLE

NOTE: BASED ON THE HIGHEST CONCENTRATIONS DETECTED DURING THE PERIOD OF SAMPLING RECORD.

300156

NOT TO SCALE



KLOCKNER & KLOCKNER PROPERTY
ROCKAWAY BOROUGH
MORRIS COUNTY, NJ

ISOCONCENTRATION MAP OF PCE
IN THE SHALLOW GROUNDWATER

ORIG. BY: MM

DWG. BY: A. Viller

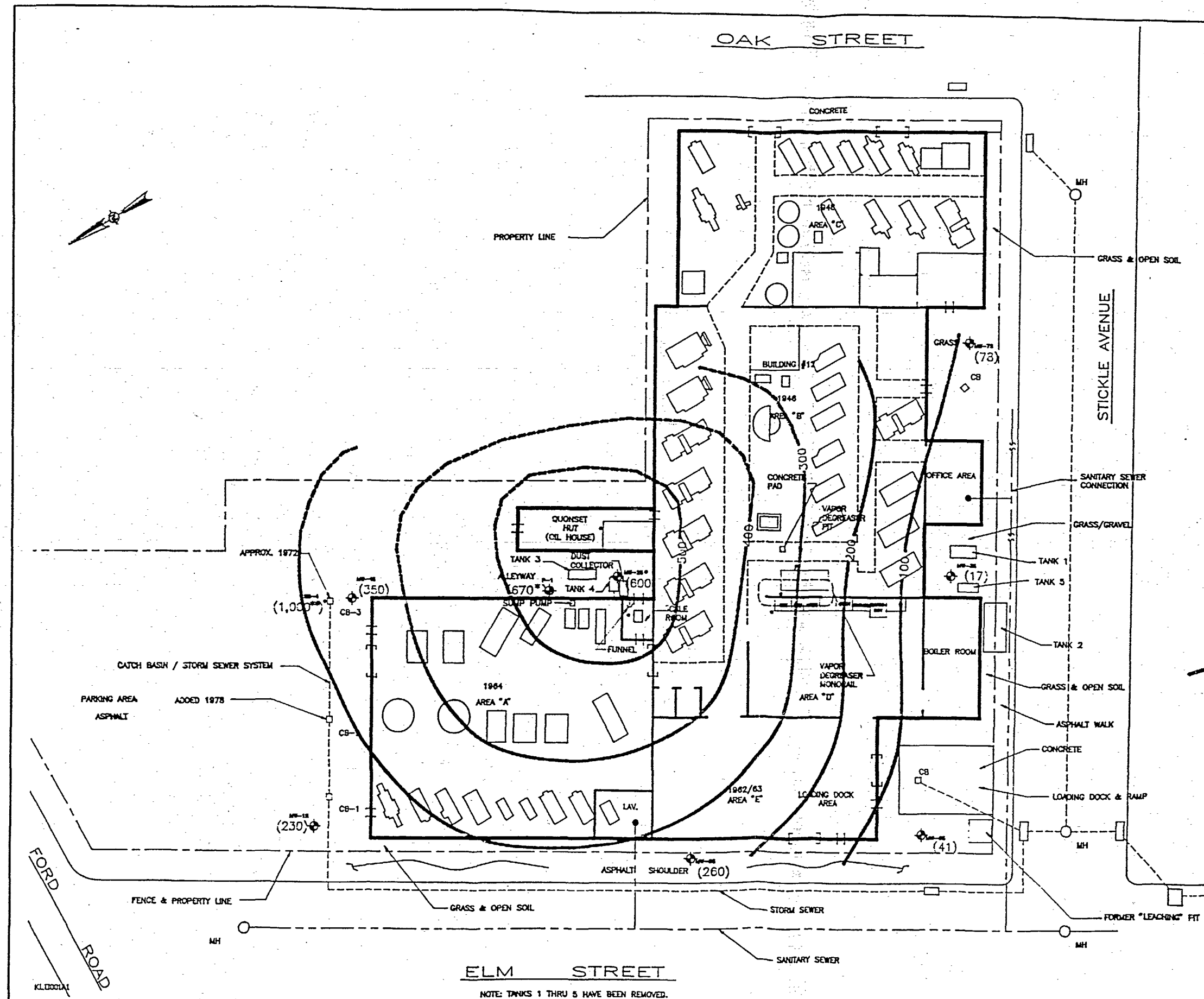
CHK. BY: MM

DWG. #:

DATE: NOV. 1995

FIGURE: 3.13

SOURCE: FIRST ENVIRONMENT



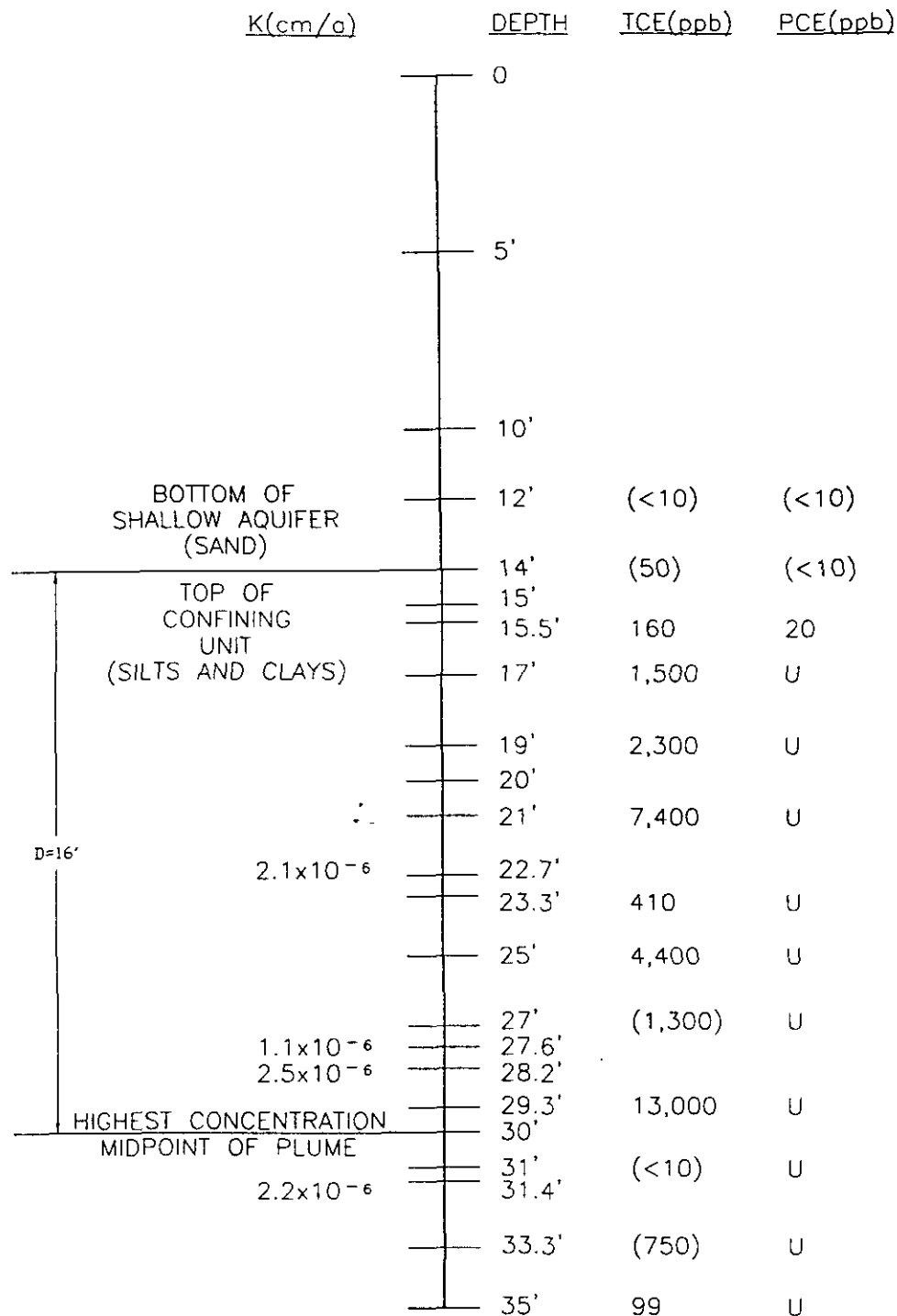
300157

NOT TO SCALE

		KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
		ISOCONCENTRATION MAP OF TCE IN THE SHALLOW GROUNDWATER	
ORIG. BY: MM DWG. #:	DWG. BY: <i>A. Vitar</i> DATE: NOV. 1995	CHK. BY: MM FIGURE: 3.14	

SOURCE: FIRST ENVIRONMENT


SB1-90



300158

LEGEND

K - PERMEABILITY
 TCE - TRICHLOROETHYLENE
 PCE - TETRACHLOROETHYLENE

	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	SHELBY TUBE TEST RESULTS SAMPLE LOCATION SB1-90	
ORIG. BY: MM	DWG. BY: A. Villar	CHK. BY: MM
DWG. #: 95030201	DATE: NOV. 1995	FIGURE: 3.15

PCE (perchloroethylene)

LEGEND

- SOIL GAS SAMPLING POINT #63
- 1.001 PCE CONCENTRATION IN SOIL GAS (ppb/L)
- 100 PCE CONCENTRATION CONTOUR IN SOIL GAS
- ND NO DATA AVAILABLE
- BOROUGH MUNICIPAL WELL NO 3

HAZARD RESEARCH CORPORATION
OCTOBER 1995

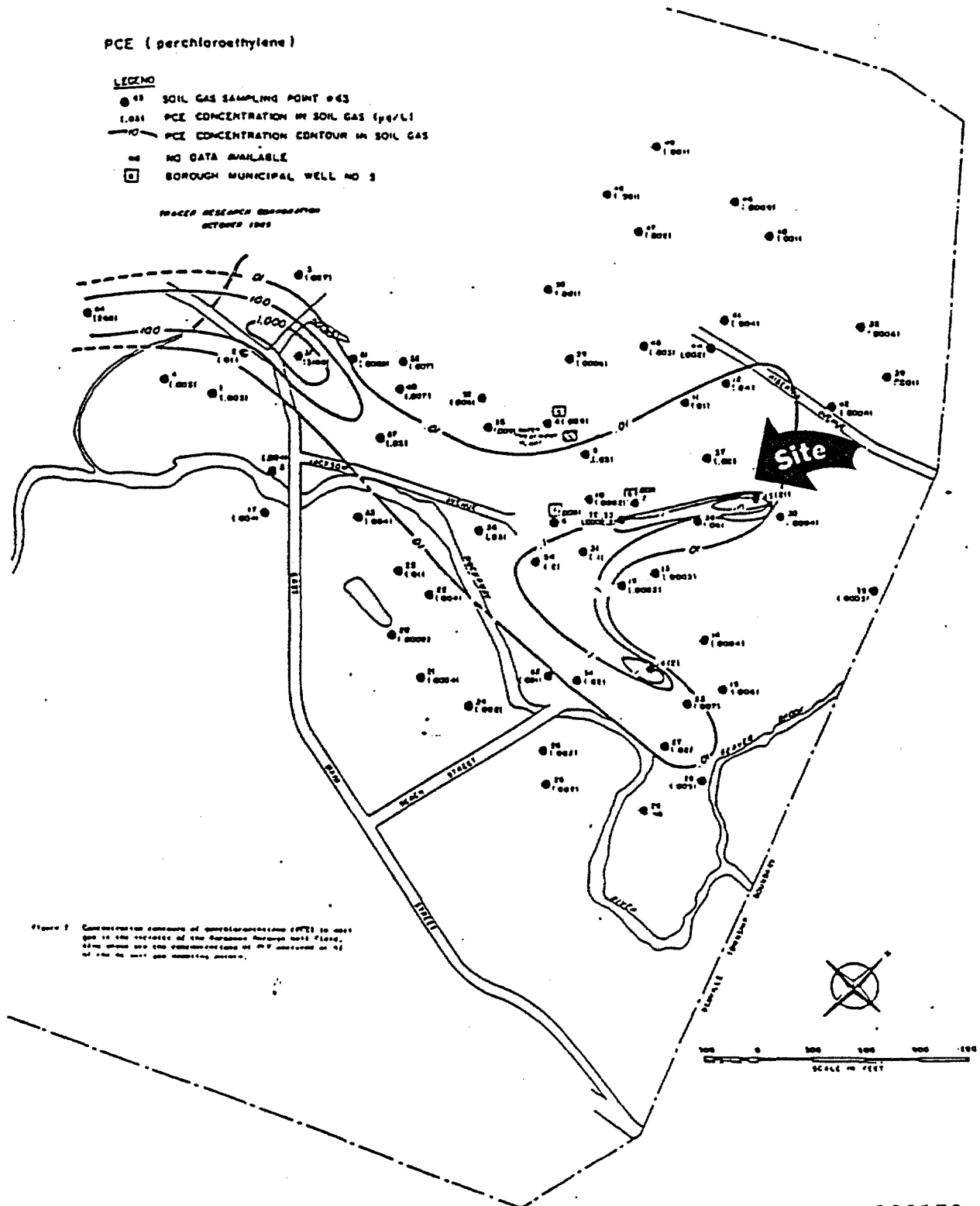



Figure 1 Concentration contours of perchloroethylene (PCE) in soil gas in the vicinity of the Borough Municipal Well Field. Contours are the concentration of PCE measured at 12 of the 42 soil gas sampling points.

300159

 THE WHITMAN Companies, INC.	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	SOIL GAS SURVEY FOR PCE	
ORIG. BY: MM	DWG. BY: A. Villar	CHK. BY: MM
DWG. #:	DATE: NOV. 1995	FIGURE: 3.16

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0 20
10 40
(FEET)

NOTE: FIELD TEST RESULTS WITH PHOTOLOG 10s50 OR 10s70
WAS OBTAINED WITH MODEL "FIELD DELINEATION OF VOLATILE CONTAMINATION
USING AMBIENT TEMPERATURE HEADSPACE ANALYSIS."

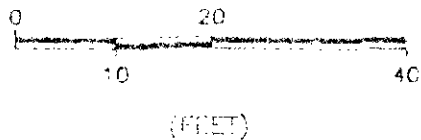
FORMER "LEACHING" PIT

300160

SOURCE: FIRST ENVIRONMENT

 THE WHITMAN COMPANY 100 E. 11th St. New York, NY 10003 (212) 354-1100	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MIDDLESEX COUNTY, NJ	
SUMMARY OF THE INVESTIGATION FIELD DELINEATION OF VOLATILE CONTAMINATION		
DATE: 11/1/83 BY: J. E. WHITMAN	DATE: 11/1/83 BY: J. E. WHITMAN	DATE: 11/1/83 BY: J. E. WHITMAN

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REVIEW AT THE U.S. EPA SUPERFUND RECORDS CENTER, 290
BROADWAY, 18TH FLOOR, NEW YORK, NY 10007




& RAMP

NOTE: FIELD GROUND RESULTS WITH PHOTOVAC 10e50
IN ACCORDANCE WITH NJDEP "FIELD DELINEATION OF VAPOR CONTAMINATION"
USING AMBIENT TEMPERATURE HEADSPACE ANALYSIS."

FORMER "LOADING" PIT

300161

SOURCE: FIRST ENVIRONMENT

 THE WHITMAN COMPANIES, INC.	KLOCKNER & KLOCKNER PROPERTY ROCKAWAY BOROUGH MORRIS COUNTY, NJ	
	SUMMARY OF HCE CONTAMINATION DETECTED AT BUILDING 12 PROPERTY	
	BY: A. J. JONES	DATE: MAY
	DATE: NOV 1995	FIGURE: 3.18

ATTACHMENT 1

NJDEP - ECRA INSPECTION REPORT FOR MASDEN INDUSTRIES

300163



Bureau of Industrial Site Evaluation
Environmental Cleanup Responsibility Act

Report of Inspection

ECRA Case #85551

Date of Inspection 12/23/85

Inspection Category: Preliminary

Inspector: Joseph Douglass

Industrial Establishment: Masden Industries - Multiform Metals Division

Location: Stickle Avenue and Elm Street
Rockaway Boro, Morris County

Individuals Involved: Joseph A. Turcotte - Ground/Water Technology, Inc.
Donald W. Richardson - Ground/Water Technology, Inc.
Carl Fabend - Owner

NARRATIVE DESCRIPTION

Arrived at referenced industrial establishment at 2:05 pm. Weather was overcast, 45°F. Met with above named individuals. Inspected portion of building and grounds associated with operations of Masden Industries. Discussed findings, departed facility at 2:55 pm.

DEFICIENCIES NOTED

1. Empty methylene chloride drums (7) are stored upside down next to storm drain catch basin. Shavings from Masden process are also visible next to catch basin. Catch basin is at low point of pavement and receives all runoff. Water in catch basin had visible oily sheen. Some roof drains also lead to catch basin via a large pvc pipe.
2. A tin storage shed located on pavement behind Masden contains numerous hazardous substances and wastes, including sulfuric acid, nitric acid, ammonium hydroxide, copper cyanide, and many containers which appear to be wastes and are not labelled. The door to the shed is left open, the floor is missing some boards. This shed represents a very hazardous situation.
3. A shavings/dust collection system is operated by Masden. Mr. Fabend said he believed this unit was permitted. The Initial ECRA Notice makes no mention of permitted facilities.
4. An elbow pipe was observed next to the shavings/dust collection system. Its purpose could not be identified during the inspection.
5. Process cooling water drains to sump from which it is pumped, discharge point uncertain.
6. A 12" by 18" by 4' deep hole was cut through concrete floor behind boiler to tank #3. Lines to and from tank 3 are in this hole. The sandy sides of the hole appear to be oily.
7. The vacuum pump/air compressor room is very oily.

300164

TR DEP-000542

8. A 5 gallon glass bottle which was encrusted with white residues and contained a yellow liquid was observed near the building entrance. According to Mr. Fabend, this bottle contained water.
9. Two apparent fill pipes were observed at the location of underground storage tank #2.
10. Soil around fill pipes to underground storage tanks 1 and 3 is stained from fuel spillage.
11. A 55 gallon drum labelled methylene chloride and mostly full was observed on soil inside the gate by underground storage tanks 1 and 2. Also noted were two full 5 gallon plastic pails.

ACTIONS REQUIRED ON THE PART OF THE APPLICANT

1. Store all drums in environmentally acceptable manner. Remove shavings and sediment from in and around catch basin, document manner of legal disposal to NJDEP. Provide diagram illustrating layout of storm sewer. Identify discharge point of storm sewer.
2. Identify and dispose of all substances and wastes in tin shed in a legal manner, document same to NJDEP.
3. Obtain a valid permit to operate the shavings/dust collection system. Inquire about permitting requirements for hood next to 55 gallon TCE drum. Contact William Hart at (609) 292-6716 for further information in this regard. Document completion of these tasks to BISE.
4. Identify purpose of pipe.
5. Identify discharge point of cooling water.
6. Provide details of why hole was dug through concrete floor.
7. Cleanup oily residues in vacuum pump/air compressor room, document method of legal disposal to NJDEP. Improve housekeeping to prevent reoccurrence of condition cited.
8. Identify contents of this bottle, source of contents, and method of disposal. Document method of legal disposal to NJDEP.
9. Determine whether two separate tanks exist at this location. If so, test tank which has not yet been tested using methods acceptable to NJDEP.
10. Remove all visably contaminated soils, document that remaining soils contain less than 100 ppm petroleum hydrocarbons through post-excavation sampling.
11. Identify source and contents of drum and pails. Document method of legal disposal to NJDEP.

ACTIONS REQUIRED ON THE PART OF BISE

1. Refer RCRA violations to Bureau of Field Operations for follow up (referred December 24, 1985, incident report #85-12-24-02N).

2. ECRA Fee overpaid; determine appropriate fee associated with testing of ugsts, advise agent to petition for refund.

Inspector/Case Manager Signature



Approved:



, Supervisor

Bureau of Industrial Site Evaluation

300166

TR DEP-000544

ATTACHMENT 2

JANUARY 12, 1990 NJDEP - ECRA COMMENT LETTER

300167



Earth protection



CN 028
Trenton, N.J. 08625-0028

(609)633-7141

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT

Michele M. Putnam
Deputy Director
Hazardous Waste Operations

John J. Trella, Ph.D., Director

Lance R. Miller
Deputy Director
Responsible Party Remedial Action

Certified Mail
Return Receipt Requested
Mr. James Youngelson
Youngelson & Murray Park
Jockey Hollow Professional Park
5 Cold Hill Road South (Unit 17E)
P.O. Box 152
Mendham, NJ 07945-0152

JAN 12 1990

Dear Mr. Youngelson:

Re: Madsen Industries - Multiform Metal and Service
Strickle Avenue and Elm Street
Rockaway Borough, Morris County
ECRA Case #85551, #85552

This letter is to apprise you that the Department is not in receipt of your ground water Sampling Results pursuant to the NJDEP letters dated June 8 and July 3, 1989 and the subsequent extension approval letter dated October 11, 1989 and also to provide a response to the soil Sampling Plan Addendum dated August, 1989.

In addition, this is to confirm the telephone conversation on December 12, 1989 between you and Stephen E. Maybury of the NJDEP regarding the November 13, 1989 NJDEP letter requesting an ECRA withdrawal affidavit. In that conversation Mr. Maybury informed you that Madsen Industries may elect to stay in the ECRA process as an "Early Filer"; however, Madsen Industries must comply with the Act.

Madsen Industries shall submit the required Ground Water Sampling Results pursuant to the above mentioned NJDEP letters and to N.J.A.C. 7:26B-4.3 within 15 days of the receipt of this letter. Madsen Industries is in violation of the Environmental Cleanup Responsibility Act (ECRA) and subject to penalties of up to \$25,000 per day. The assessment of any penalties by the Department will not relieve Madsen Industries of its responsibilities under the regulations of ECRA. Please also be advised that a Cleanup Plan for groundwater shall include a proposal for both the shallow and deep aquifers.

This office views this delay as a violation of the Act and will initiate appropriate enforcement action if we are not in receipt of your Sampling Results within the specified timeframe.

300168

The Department has completed its review of the August, 1989 Sampling Plan Addendum for soils and has concluded that this soils Sampling Plan is approvable as conditioned below. Masden Industries shall submit the results of this Sampling Plan Addendum pursuant to N.J.A.C. 7:26B-4.3 within 90 days from the receipt of this approval.

1. Masden Industries shall conduct the proposed sampling at the indoor degreaser pit.
2. Masden Industries shall conduct verification soil sampling using USEPA Method 624 for volatile organics at the former tank #5 locations. Two samples shall be collected from the undisturbed soils beneath the fill material at locations along the former tanks center line. Please be advised that the former analytical method (USEPA 503.1) used for volatile organics is unacceptable for verification of soils cleanup in this area.
3. Masden Industries shall propose cleanup of petroleum hydrocarbon contaminated soils at Catch Basin CB-2 and the adjacent pipe joint with repairs to the system to prevent future discharge.
4. Masden Industries shall report all contaminant concentrations in the same units. It is recommended that all soils results be reported in part per million (PPM) concentrations.
5. Masden Industries shall insure that the following deficiencies regarding laboratory deliverables are corrected in all future submissions.
 - a. All peaks on chromatograms shall be labeled
 - b. The copy quality of all laboratory data sheets shall be sufficient to allow a review of the sheets.
 - c. All changes to laboratory sheets, including typed changes, shall be initialed.
6. Masden Industries shall submit all future documents (ie. Cleanup Plan) as stand alone documents to insure a complete review of all areas of concerns and proposals. All areas of both current and past environmental concern on-site shall be identified and historical results, maps, and recommendations and conclusions shall be included. Following are additional ECRA requirements for Data, Presentations and Proposals.

A. Data Requirements

The following information shall be included with the results of sampling.

1. Logs for all soil borings and wells.
2. Soil profile logs for all excavations.

3. Monitoring Well Certification Forms: Form A (As-Built Certification) and Form B (Location Certification) shall be completed for each monitoring well installed. Form A shall be submitted with the results of sampling. Because additional wells are sometimes required to complete a hydrogeologic investigation, Form B may be submitted after completion of the installation of all required ground water monitoring wells, unless required prior to that time by the Department. As built diagrams of all wells shall be included with Form A.
4. A scaled site map of all well and soil boring locations.
5. A minimum of two ground water contour maps, including depth to ground water and reference point elevation, with depth to water readings taken at least 30 days apart. If applicable, depth to water readings taken prior to purging shall be used for contouring purposes. Any corrections made to the static water level due to the presence of free product must be reported, along with the thickness of the product layer.
6. Ground water samples shall be collected a minimum of two weeks following development of the wells.
7. At a minimum, the following purge information shall be provided along with the analytical results: date and time of purge, depth to water before purging, purge method, estimated volume of purged water, depth to water after purging, date and time of sampling, depth to water before sampling, and sampling method.
8. Provide in a tabular format the results of sampling. Include the sample number, location, interval and depth of sample, sample matrix, and the analytical methods used. The enclosed summary format sheets are provided as guidance for summarizing data.
9. A site map which lists the concentrations of all significant contamination found (above ECRA action levels) at all sampling locations. The labelling of data should be keyed to facilitate interpretation, especially at locations where more than one type of contaminant is found. The use of contaminant isopleth maps is also encouraged.

B. Data/Results Presentation

1. Because of case management workloads and volumes of data to be reviewed and processed, the above noted formatting requirements are essential to insure complete and timely review of the submittal.

2. Tier II deliverables should be identified and separated from the submittals, discussion, conclusions and data summary sheets. The enclosed Laboratory Deliverables checklist should be completed and returned with the Tier II deliverables.
3. All submittals of text/data shall be forwarded in triplicate and shall be properly paginated, bear a table of contents and be bound (1 copy may be unbound for filing purposes).
4. Failure to organize submittal information as outlined above can constitute reason to return the submittal to the consultant for correction and resubmission, thus causing further delay in case processing.
5. Failure to address these conditions and provide documentation where required shall constitute non-compliance with ECRA, no final approvals or case closure will occur until these issues are resolved.

C. The Cleanup Plan Proposal

During the course of the implementation of the sampling and the generation and evaluation of data, the consultant will be considering the development of a Cleanup Plan. To insure a complete and timely review of the submittal, the Cleanup Plan shall be a stand alone, self-supporting document. As a guide to this process, the following elements should be included in the formation of the plan.

1. Introduction
2. Table of Contents
3. Summary of Environmental Concerns. Include the results of previous sampling.
4. The proposed remedial actions. Include the evaluation of any alternative remedial actions if appropriate.
5. Cleanup levels to be achieved. Be specific with regard to media and parameters.
6. A Work Plan must detail the specific activities that will be used to complete the proposed cleanup objectives.
7. A post-remediation sampling and monitoring plan.
8. A specific time table for implementation of the Cleanup Plan which includes milestones in the project.
9. Progress reports, dependant on the duration of the cleanup.

10. Estimate costs for cleanup:

- a. capital costs;
- b. operation and maintenance costs;
- c. monitoring system costs;
- d. laboratory costs;
- e. engineering, legal, and administrative costs; and
- f. contingency costs.

D. Please be advised that, according to N.J.A.C. 7:26B-4.3, sampling results shall be accompanied by:

- a. a proposed Negative Declaration; or
- b. a proposed Cleanup Plan; or
- c. a revised Sampling Plan to further delineate the extent and degree of contamination on or from the industrial establishment.

Failure to submit the appropriate accompanying document as described above will constitute reason to return the submittal to the consultant for correction and resubmission, thus causing further delay in case processing.

E. Please be advised that the results of sampling shall be accompanied by the appropriate fee as required by N.J.A.C. 7:26B-1.10. The enclosed Fee Submittal Form is provided for guidance to determine the fees required; this form should be completed and returned with the submittal package.

A Cleanup Plan shall be accompanied by a fee based on the cost of cleanup.

Submission of analytical data shall be assessed a \$1,000.00 review fee.

- 7. Masden Industries shall accomplish this investigation and any further analytical investigations by the methods outlined in this Sampling Plan. If any change in methods outlined in this sampling plan is necessary or if any delays are encountered, Masden Industries shall inform BEECRA in writing prior to implementation.
- 8. Masden Industries shall submit summarized analytical results in tabular form. Masden Industries shall also submit with the analytical data all documents associated with the sampling and testing, including but not limited to lab sheets, chain of custody, results of blank analyses, lab chronicles, summary of analytical instrument tuning, and analytical methods used.
- 9. Masden Industries shall notify NJDEP in writing at least five business days prior to implementation of sampling.

10. If contamination is determined to exist above a level found acceptable by NJDEP, Masden Industries shall prepare and submit a Cleanup Plan developed pursuant to N.J.A.C. 7:26B-5.3 to address said contamination. If the data from implementation of the approved Sampling Plan indicates the presence of contamination, but is not sufficient to define the full horizontal and vertical extent, then such areal definition shall be proposed as a Sampling Plan Addendum in a form which meets the criteria of N.J.A.C. 7:26B-3.2(c)11. The horizontal and vertical extent of contamination shall be determined before an approvable Cleanup Plan can be developed.

Any questions regarding this matter should be directed to the Case Manager, Steve Maybury at 609-633-7141.

Sincerely,

Louis Carlsberg for

Kenneth T. Hart, Chief
Bureau of Environmental Evaluation
and Cleanup Responsibility Assessment

SEM/sr

Enclosure

cc: Jennifer Eck, BGWDC
Judith Morrow, BEERA

ATTACHMENT 3

**LISTS OF HAZARDOUS SUBSTANCES HISTORICALLY PRESENT
AT MASDEN INDUSTRIES**

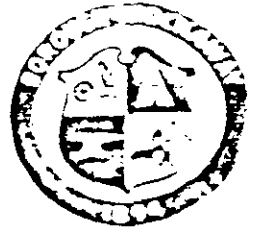
300174



Borough of Rockaway

BUREAU OF FIRE PREVENTION

MUNICIPAL BUILDING • 1 EAST MAIN STREET • ROCKAWAY, NEW JERSEY 07866



HAZARDOUS SUBSTANCES QUESTIONNAIRE

COMPANY NAME: MASDEN INDUSTRIES, INC.

DIVISION OR PLANT NAME: _____

MAILING ADDRESS: P.O. BOX 695, Rockaway, NJ ZIP 07866 STATE NJPLANT LOCATION (If not as above): 20 ELM STREET, ROCKAWAY, NJ 07866NATURE OF BUSINESS: Manufacturer of Glass-to-Metal SealsTELEPHONE NUMBER: (201) 625-3500

INSURANCE COVERAGE FOR FIRE LOSS BY (List Insurance company name, address and Branch office)

Agent - CPI, Inc, 2 Ridgedale Ave, Cedar Knolls, NJDOES THIS FACILITY MANUFACTURE, PROCESS, FORM, PREPACKAGE, RELEASE, USE, DISPOSE, OR STORE, ANY HAZARDOUS SUBSTANCES Yes ☒ No ☐

IF "NO", PROCEED TO PAGE NUMBER 4 AND COMPLETE THE "PERSONS TO CONTACT" AND "CERTIFICATION STATEMENT".

IF "YES", LIST ALL HAZARDOUS SUBSTANCES AT YOUR FACILITY, WITH MAXIMUM QUANTITY OF EACH, THAT WOULD BE PRESENT AT ANY ONE GIVEN TIME DURING THE YEAR. (Use additional sheets as necessary)

SUBSTANCESQUANTITIESSee Attached

LOCATION	NAME	QTY
1	METHANOL	50 GAL
2	FLUOBORIC ACID	60 GAL
3	TRICHLORETHYLENE	30 GAL
4	161 DESCALER	20 GAL
5	935 KOVAR	5 GAL
6	HYDROFLUORIC ACID	3.5GAL
7	ALMCO 2220 HD	10 GAL
8	15-L	10 GAL
9	COOKS DRAW 5025 OIL	45 GAL
10	AMMONIUM BIFLOURIDE	20 LBS
11	SODIUM METABORATE	150 LBS
12	METHYLENE CHLORIDE	1800 LBS
13	RODINE 50	10 GAL
14	OXYGEN	2
15	NITROGEN	2
16	HYDROGEN	3
17	PROPANE	3
18	HELIUM	1
19	ACETELYNE	1
20	FERRIC CHLORIDE	5 GAL

300177

IRONT

OFF. 2.15

OFF. 2.15

(2)
(11)

(12)

(1)

(9)

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(19)
(14)

MACH
SHOP

EXP. RES.

(18)

(3)

(10) (4) (5)
(13) (6) (14)
(17) (15) (16)
(20) (7) (8)

(12)

WHERE HAZARDOUS SUBSTANCES ARE STORED INCLUDING ALL SURFACE AND UNDERGROUND STORAGE TANKS AND THE RESPECTIVE GALLONS STORED IN EACH TANK

METHODS OF HAZARDOUS SUBSTANCE DISPOSAL:

IF SURFACE AND UNDERGROUND TANKS ARE USED FOR THE STORAGE OF HAZARDOUS SUBSTANCES PLEASE COMPLETE THE FOLLOWING:

Map out on a sheet of paper the location of each tank and specify the type of qu (in gallons) of substances stored in each tank.

List the date(s) in which each tank was last tested for leaks:

No tanks at our Location

ARE ALL TANKS FREE FROM LEAKS? Yes ☐ No ☐

IF "NO", STATE WHICH TANKS ARE NOT FREE FROM LEAKS, THE REASONS WHY THEY ARE NOT AND THE ON WHICH CORRECTIVE ACTION WILL BE TAKEN:

WHAT SYSTEM IS PRESENTLY BEING USED, BY YOUR COMPANY, TO DETECT A LEAK IN A SURFACE OR U GROUND STORAGE TANK?

IS THERE AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM ANYWHERE WITHIN THE PROPERTY BOUND OF YOUR FACILITY? Yes ☐ No ☐

IF YES, PLEASE ANSWER THE FOLLOWING QUESTIONS:

(a) Is it presently in use? Yes ☐ No ☐

(b) What materials are disposed of through this system?

(c) Map out the systems' location on a sheet of paper.

(d) What type of disposal area is used? (i.e., seepage pit, disposal bed, disposal tre

(e) Is the disposal area preceded by a septic tank? Yes ☐ No ☐

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1. LICENSED HAZARDOUS SUBSTANCE HAULER(S). (If more than one, list on a separate sheet of paper.)

NAME OF HAULER: _____

ADDRESS: _____

(Municipality) ZIP _____ STATE _____

TELEPHONE NUMBER: _____

PERMIT NUMBER: _____

2. PREVIOUS DISPOSAL PRACTICES (1930-1977):

HAS THIS FACILITY PREVIOUSLY DISPOSED OF SUBSTANCES CONTAINING ANY OF THE SELECTED SUBSTANCES
AT ANY LAND DISPOSAL SITE (i.e. by land spreading or burial, landfilling, lagoon, or seepage
(a) EITHER ON OR OFF SITE? Yes ☐ No ☒

IF AVAILABLE PROVIDE THE FOLLOWING INFORMATION FOR EACH DISPOSAL SITE. (Use additional sheet
if necessary)

NAME AND LOCATION OF SITE: _____

TIME PERIOD SITE WAS USED: _____

NAME OF SELECTED SUBSTANCES DISPOSED AT SITE, INCLUDING ITS PHYSICAL STATE AND AMOUNT DISPOSED:

3. DOES THIS FACILITY POSSESS ANY DISCHARGE PERMITS? (e.g. NPDES and/or NJPDES, etc.) Yes ☐ No ☒

IF YES, LIST TYPE AND NUMBER OF PERMIT WITH NAME OF RECEIVING STREAMS: _____

Non-contact cooling - warm water piped to drain which empties into sewer.

CONTACT PERSONS

Technical Assistance:

NAME: David Babcock TITLE: Chief Engineer

TELEPHONE (Day): 625-3500 (Night): 756-0721

NAME: David T. Landsittel TITLE: Executive Vice President

TELEPHONE (Day): 625-3500 (Night): 464-5399

Response Notification:

NAME: E. C. Fabend TITLE: President

TELEPHONE (Day): 625-3500 (Night): 746-5336

The above information will be kept on file in the Bureau of Fire Prevention for the sole purpose of public safety.

Thomas Trapasso
Fire Marshall

Sgt. G. Anderson Rockaway Police
Fire Chief Rockaway Fire Dept.

* Mr. Ndsittel said these are to be shipped to Haiti

+ Dynaglass is same ownership as Masden

X Substances on Masden Ind. fire dept report

Wastes found in shed

- 1- 55 gal with drum pump - empty
- 1 - 55 gal multi purpose gear oil - material in it.
- 1- 55 gal unknown substance in it
- 1- 5 gal pail Acetic Acid
- 1 - 20 gal fiber drum - Copper Cyanide
- 2 - 90 lb. Carborays - Ammonium Hydroxide
- 1 - 20 gal fiber drum - Rodine 50
- * 5 - 5 pint containers ^{in a box} Hydrochloric Acid
- 1 - 5 pint container ^{in a box} Sulfuric Acid
- 3 - cardboard boxes unknown contents
- 1 - ~20 gal keg like container - oxidizer
- 1 - 20 gal - black plastic drum made out to Dynaglass Inc
- 1 - 20 gal - white plastic container Fluoboric Acid
- 1 - 5 gal plastic bottle - 1/2 full red liquid
- 1 - 55 gal fiber drum with 3/5 white powder and a 5 gal empty clear plastic bottle sitting inside on powder
- 1 - 55 gal miscellaneous material - ..
- 1 - 20 gal fiber drum - paper + lab ware debris
- 1 - 20 gal - rusted drum, label not readable
- 2 - 5 gal pails stacked one on top other; "Oxidizer" on top; white crystal formed material protruding from between drums; bottom drum rusted & no label visible
- 1 - white styrofoam pack - nitric acid

April 9, 1986

Page 1

Ground/Water Technology, Inc.
100 Stickle Ave
Rockaway, NJ 07866

Attention: Gary Cluen

Re: Your Letter of 4/8/86

Subject: Status of DEP inventory of material in shed

Dear Mr. Cluen:

The following is an item by item description of the handling of all items inventory and attached bill of lading #5529 of chemicals shipped to Haiti on 1/24/86.

<u>Item Description per DEP</u>		<u>Status</u>
1 55gal with drum pump - empty	none	drum to Elcc
1 55gal multi-purpose gear oil		inside building
1 55gal unknown substance	Cooks Draw Oil	inside building
1 5gal pail Acetic Acid		shipped to Haiti
1 20gal Fiber drum Copper Cyanide		inside building
2 90# Ammonium Hydroxide		consolidated into 1 carboy inside building
1 20 gal Fiber drum Rodine 50		inside building
5 Spint containers HCL		Haiti
1 Spint containers H2SO4		inside building
3 cardboard boxes unknown contents	emptied	Reagents stored in chemical storage area
1 20gal Keg-like container	empty Nitric Acid Container	
1 20gal black plastic drum made out to Dynaglass	contained Fluorboric acid consolidated w/following drum	
1 20gal white plastic container Fluorboric acid	see above	inside building
1 5gal plastic bottle 1/2 full red liquid	Methylene chloride used in production with red dye	of candles

300182

April 9, 1986
page 2

Re: Your Letter of 4/8/86

Subject: Status of DEP inventory of material in shed

1 55gal with 3/5 white powder	endbond Q527	repackaged being sent to Haiti
1 55gal miscellaneous material	emptied	stored in chemical storage area
1 20gal fiber drum paper & lab debris	Emptied	glassware discarded, reagent chemicals to chemical storage
1 20gal pail rusting drum	tar	Klockners resp re: letter of 1/31/86 to Joseph Douglas DEP
2 5gal pails stacked with white crystal labeled oxider	sodium Hydroxide	repackaged crystallized mat'l removed
1 white styrofoam pack nitric acid		Plastic sent to Haiti

End of DEP inventory

All of these materials below are used in our facility in PAF in either plating or soldering lines. They are considered to be normal inventoried chemicals for Masden and have been shipped to Haiti for use in our production lines as follows;

Chemical	Use in Haiti
Actane L59	Nickel plating activator
Nitric Acid	Electroless Nickel plating equipment passivator
Acetic Acid	component of Electroless Nickel plating bath
Alpha #446 Flux	Quality control and production
Alpha #346 "	fluxes for solder dipping &
Alpha #100 "	plating
Alpha #123 "	
Kester #715 "	

300183

April 9, 1986
page 3

Re. Your Letter of 4/8/86

Subject: Status of DEP inventory of material in shed

Caustic Soda

Plating solution PH control

Tin lead plating solution

Tin/lead plating solution bath
replenisher

Enthone EDTA solution

0.0575 EDTA titrating solution of
Electroless nickel plating bath
analysis

Sincerely yours,

MASDEN INDUSTRIES, INC.

David J. Babcock
Chief Engineer

300184

T-41

THIS IS CARBONLESS PAPER
Detach set from pad BEFORE writing.
Do NOT WRITE ON PAD or copies will go thru to next set.

Form ADM-015
11/82

State of New Jersey
Department of Environmental Protection

REFERRAL FORM

Date

7/16/90

TO

Lance Kalix

FROM

Barbara Longenecker

TELEPHONE EXT.

609/292-6714

For Your

☐ ACTION

☐ APPROVAL

☐ INFORMATION

☒ REVIEW

☐ COMMENTS

☐ SIGNATURE

☐ FILE

☐

Multi-Form Metals (aka Masden) Community
Right to Know Survey for 1989 is enclosed
for your review with a code sheet to
aid your reading of the inventory pages.

FILE COPY

COMMUNITY RIGHT TO KNOW SURVEY FOR 1989

to satisfy requirements under SARA, Title III, Section 312
and New Jersey Community Right to Know

300186

NJEIN SIC COUNTY/MUNIC. DUE DATE

<u>124296-01000</u> 07025861000 <u>3496-1435</u> <u>MONTI-Form Metals Inc</u> <u>22 South Park St</u> <u>Montclair, N.J. 07042</u> <u>BC</u>		IMPORTANT: A separate survey must be completed for each facility. (A) FACILITY LOCATION If the facility or township location is different than the mailing address on the label, enter location address or township below. <u>20 ELM STREET</u> <u>ROCKAWAY, NJ 07866</u> Check here if you would like your survey mailed to above address <input checked="" type="checkbox"/> <u>NO</u>	
(B) Does this facility use, store, or produce any hazardous materials which must be reported under the N.J. Worker & Community Right to Know Act or Section 312, Title III of the Superfund Amendments and Reauthorization Act? (See Reportable Substances and Thresholds) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		(D) Number of employees at facility: <u>84</u> (E) Number of facilities in New Jersey: <u>1</u> (F) Dun and Bradstreet No. <u> </u> (G) Check the box if you were granted a R&D exemption last year or if you wish to receive an application questionnaire. <input type="checkbox"/>	
(C) Briefly describe the nature of the operations or business conducted at this facility: <u>MANUFACTURE FORMED WIRES</u>			
(H) CERTIFICATION OF OWNER/OPERATOR OR AUTHORIZED REPRESENTATIVE — I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. Signature <u>[Signature]</u> Date <u>7/3/90</u> Phone Number <u>(201) 625-3957</u> Name (Print) <u>E. CARL FABEND</u> Title <u>President</u>			
(I) POLICE AND FIRE DEPARTMENT — Enter the respective phone numbers, names and addresses (including Zip Code) of your local police and fire departments in the spaces below.			
POLICE DEPT. Phone Number <u>(201) 989-7000</u> Name <u>ROCKAWAY POLICE DEPARTMENT</u> Address <u>65 ME HOPE Rd</u> Municipality <u>ROCKAWAY</u> Zip <u>07866</u>		FIRE DEPT. Phone Number <u>(201) 989-7000</u> Name <u>ROCKAWAY FIRE DEPARTMENT</u> Address <u>ART St</u> Municipality <u>ROCKAWAY</u> Zip <u>07866</u>	
(J) FACILITY EMERGENCY CONTACT Name <u>David Lands Heil</u> Title <u>E. U. P.</u> Facility Phone Number <u>625-3957</u> Emergency Contact Phone Number <u>(201) 964-4399</u>			
NOTE: Make copies of this survey! The law requires that you send a copy to your County Lead Agency, Local Emergency Planning Committee and your local police and fire departments. (County agency and local committee addresses in Instructions)		Return original to: RIGHT TO KNOW PROGRAM CN 405 Trenton, NJ 08625-0405	

FOR INTERNAL USE ONLY

STAT ☐FTS ☐E ☐F ☐

IMPORTANT! Read all instructions before completing. Photocopy this sheet, if you need additional forms. Please print or type all responses. Complete sections A-F before making photocopies of this page.

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Page 2 of 4

Reporting Period: January 1 - December 31, 1989

FACILITY IDENTIFICATION AND SITE LOCATION

A. NJEIN 12429601000

C. Location Address 20 ELM STREET

B. Facility Name MULTI-FORM METALS

D. City ROCKAWAY E. State NJ F. Zip 07866

CHEMICAL DESCRIPTION	HAZARDS	Inventory (Ranges)	STORAGE CODES AND LOCATIONS
Substance <u>PETROLEUM DISTILLATES</u> CAS No. <u>8002-05-9</u> DOT No. <u>1268</u> Substance No. (if available) <u>2648</u> Percent <u>60</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	(Codes for all that apply.) <u>67, 70, 66</u>	(Enter Code) Max. Daily <u>10</u> Avg. Daily <u>10</u> Days Onsite <u>365</u> (Actual Number)	(Enter Codes, except Location(s); supply narrative.) Container <u>38</u> Conditions <u>01, 04</u> Location(s) <u>S.W. CORNER</u>
Substance <u>PETROLEUM DISTILLATES</u> CAS No. <u>8002-05-9</u> DOT No. <u>1268</u> Substance No. (if available) <u>2648</u> Percent <u>60</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>67, 70, 66</u>	Max. Daily <u>11</u> Avg. Daily <u>11</u> Days Onsite <u>365</u> (Actual Number)	Container <u>47</u> Conditions <u>01, 04</u> Location(s) <u>CENTER OF BUILDING</u>
Substance <u>PETROLEUM DISTILLATES</u> CAS No. <u>8002-05-9</u> DOT No. <u>1268</u> Substance No. (if available) <u>2648</u> Percent <u>57</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>67, 70, 66</u>	Max. Daily <u>09</u> Avg. Daily <u>09</u> Days Onsite <u>365</u> (Actual Number)	Container <u>38</u> Conditions <u>01, 04</u> Location(s) <u>FAR SOUTH ROOM</u>
Substance <u>PETROLEUM CRUDE OIL</u> CAS No. <u>8002-05-9</u> DOT No. <u>1267</u> Substance No. (if available) <u>2647</u> Percent <u>53</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>67, 70, 66</u>	Max. Daily <u>09</u> Avg. Daily <u>09</u> Days Onsite <u>365</u> (Actual Number)	Container <u>38</u> Conditions <u>01, 04</u> Location(s) <u>FAR SOUTH ROOM</u>
Substance <u>DYES</u> CAS No. <u>2386</u> DOT No. <u>1602</u> Substance No. (if available) <u>2386</u> Percent <u>52</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>70, 67</u>	Max. Daily <u>09</u> Avg. Daily <u>09</u> Days Onsite <u>365</u> (Actual Number)	Container <u>38</u> Conditions <u>01, 04</u> Location(s) <u>WEST WALL -</u> <u>CENTER OF ROOM</u>
Substance <u>BUTYL-ACETATE</u> CAS No. <u>123-86-4</u> DOT No. <u>1123</u> Substance No. (if available) <u>1329</u> Percent <u>54</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>70, 67</u>	Max. Daily <u>09</u> Avg. Daily <u>09</u> Days Onsite <u>365</u> (Actual Number)	Container <u>38</u> Conditions <u>01, 04</u> Location(s) <u>WEST WALL -</u> <u>CENTER OF ROOM</u>
Substance <u>DENATURED ALCOHOL</u> CAS No. <u>64-17-5</u> DOT No. <u>1170</u> Substance No. (if available) <u>0844</u> Percent <u>55</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>70, 67</u>	Max. Daily <u>09</u> Avg. Daily <u>09</u> Days Onsite <u>365</u> (Actual Number)	Container <u>38</u> Conditions <u>01, 04</u> Location(s) <u>WEST WALL -</u> <u>CENTER OF ROOM</u>

See instructions for codes.

IMPORTANT! Read all instructions before completing. Photocopy this sheet, if you need additional forms. Please print or type all responses. Complete sections A-F before making photocopies of this page.

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Reporting Period: January 1 - December 31, 1989

FACILITY IDENTIFICATION AND SITE LOCATION

A. NJEIN 12429601000

C. Location Address 20 ELM STREET

B. Facility Name MULTI-FORM METALS

D. City ROCKAWAY E. State NJ F. Zip 07866

CHEMICAL DESCRIPTION	HAZARDS	Inventory (Ranges)	STORAGE CODES AND LOCATIONS
Substance <u>BUTYL ALCOHOL</u> CAS No. <u>71-36-3</u> DOT No. <u>1120</u> Substance No. (if available) <u>1330</u> Percent <u>52</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	(Codes for all that apply.) <u>70, 67, , , ,</u>	(Enter Code) Max. Daily <u>09</u> Avg. Daily <u>09</u> Days Onsite <u>365</u> (Actual Number)	(Enter Codes, except Location(s); supply narrative.) Container <u>38</u> Conditions <u>01, 04</u> Location(s) <u>WEST WALL CENTER</u>
Substance <u>DEMATURED ALCOHOL</u> CAS No. <u>64-17-5</u> DOT No. <u>1170</u> Substance No. (if available) <u>0844</u> Percent <u>58</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>70, 67, , , ,</u>	Max. Daily <u>09</u> Avg. Daily <u>09</u> Days Onsite <u>365</u> (Actual Number)	Container <u>38</u> Conditions <u>01, 04</u> Location(s) <u>WEST WALL CENTER ROOM</u>
Substance <u>N-BUTYL ACETATE</u> CAS No. <u>123-86-4</u> DOT No. <u>1123</u> Substance No. (if available) <u>1329</u> Percent <u>54</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>70, 67, , , ,</u>	Max. Daily <u>09</u> Avg. Daily <u>09</u> Days Onsite <u>365</u> (Actual Number)	Container <u>38</u> Conditions <u>01, 04</u> Location(s) <u>WEST WALL CENTER ROOM</u>
Substance <u>DEMATURED ALCOHOL</u> CAS No. <u>64-17-5</u> DOT No. <u>1170</u> Substance No. (if available) <u>0844</u> Percent <u>55</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>70, 67, , , ,</u>	Max. Daily <u>09</u> Avg. Daily <u>09</u> Days Onsite <u>365</u> (Actual Number)	Container <u>38</u> Conditions <u>01, 04</u> Location(s) <u>WEST WALL CENTER ROOM</u>
Substance <u>ISOPROPYL ALCOHOL</u> CAS No. <u>67-63-0</u> DOT No. <u>1219</u> Substance No. (if available) <u>1076</u> Percent <u>52</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>70, 67, , , ,</u>	Max. Daily <u>09</u> Avg. Daily <u>09</u> Days Onsite <u>365</u> (Actual Number)	Container <u>38</u> Conditions <u>01, 04</u> Location(s) <u>WEST WALL CENTER ROOM</u>
Substance <u>PAINTS</u> CAS No. <u>2628</u> DOT No. <u>1263</u> Substance No. (if available) <u>2628</u> Percent <u>60</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>70, 67, 66, , ,</u>	Max. Daily <u>11</u> Avg. Daily <u>11</u> Days Onsite <u>365</u> (Actual Number)	Container <u>46</u> Conditions <u>01, 04</u> Location(s) <u>WEST WALL - BACK</u>
Substance <u>FLUOBORIC ACID</u> CAS No. <u>16872-11-0</u> DOT No. <u>1775</u> Substance No. (if available) <u>0934</u> Percent <u>55</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>68, 67, 66, , ,</u>	Max. Daily <u>11</u> Avg. Daily <u>11</u> Days Onsite <u>365</u> (Actual Number)	Container <u>38</u> Conditions <u>01, 04</u> Location(s) <u>SOUTH EAST CORNER</u>

See instructions for codes.

IMPORTANT! Read all instructions before completing. Photocopy this sheet, if you need additional forms. Please print or type all responses. Complete sections A-F before making photocopies of this page.

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Reporting Period: January 1 - December 31, 1989

FACILITY IDENTIFICATION AND SITE LOCATION

A. NJEIN 12429601000

C. Location Address 20 ELM STREET

B. Facility Name MULTI-FORM METALS

D. City ROCKAWAY E. State NJ F. Zip 07866

CHEMICAL DESCRIPTION	HAZARDS	Inventory (Ranges)	STORAGE CODES AND LOCATIONS
Substance <u>ACETYLENE TETRABROMIDE</u> CAS No. <u>77-27-6</u> DOT No. <u>2504</u> Substance No. (if available) <u>0016</u> Percent <u>60</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	(Codes for all that apply.) <u>67</u> , <u>68</u> , _____ _____, _____	(Enter Code) Max. Daily <u>11</u> Avg. Daily <u>11</u> Days Onsite <u>365</u> (Actual Number)	(Enter Codes, except Location(s); supply narrative.) Container <u>38</u> Conditions <u>01</u> , <u>04</u> Location(s) <u>SOUTH EAST CORNER</u>
Substance <u>SULFURIC ACID</u> CAS No. <u>7664-93-9</u> DOT No. <u>1830</u> Substance No. (if available) <u>1261</u> Percent <u>59</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>68</u> , <u>67</u> , _____ _____, _____	Max. Daily <u>10</u> Avg. Daily <u>10</u> Days Onsite <u>365</u> (Actual Number)	Container <u>39</u> Conditions <u>01</u> , <u>04</u> Location(s) <u>SOUTH EAST CORNER</u>
Substance <u>NITRIC ACID</u> CAS No. <u>7097-22-2</u> DOT No. <u>2031</u> Substance No. (if available) <u>1356</u> Percent <u>54</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>68</u> , <u>67</u> , <u>66</u> , _____ _____, _____	Max. Daily <u>10</u> Avg. Daily <u>10</u> Days Onsite <u>365</u> (Actual Number)	Container <u>39</u> Conditions <u>01</u> , <u>04</u> Location(s) <u>SOUTH EAST CORNER</u>
Substance <u>HYDROFLUORIC ACID</u> CAS No. <u>7664-39-3</u> DOT No. <u>1052</u> Substance No. (if available) <u>1014</u> Percent <u>59</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>68</u> , <u>67</u> , _____ _____, _____	Max. Daily <u>10</u> Avg. Daily <u>10</u> Days Onsite <u>365</u> (Actual Number)	Container <u>38</u> Conditions <u>01</u> , <u>04</u> Location(s) <u>S.E. CORNER</u>
Substance _____ CAS No. _____ DOT No. _____ Substance No. (if available) _____ Percent _____ State _____ Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	_____, _____, _____ _____, _____	Max. Daily _____ Avg. Daily _____ Days Onsite _____ (Actual Number)	Container _____ Conditions _____, _____ Location(s) _____
Substance _____ CAS No. _____ DOT No. _____ Substance No. (if available) _____ Percent _____ State _____ Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	_____, _____, _____ _____, _____	Max. Daily _____ Avg. Daily _____ Days Onsite _____ (Actual Number)	Container _____ Conditions _____, _____ Location(s) _____
Substance _____ CAS No. _____ DOT No. _____ Substance No. (if available) _____ Percent _____ State _____ Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	_____, _____, _____ _____, _____	Max. Daily _____ Avg. Daily _____ Days Onsite _____ (Actual Number)	Container _____ Conditions _____, _____ Location(s) _____

See instructions for codes.

CODESPERCENTAGE CODES

61 Unknown
60 100%
59 90 - 99%
58 80 - 89%
57 70 - 79%
56 60 - 69%
55 50 - 59%
54 25 - 49%
53 10 - 24%
52 1 - 9%
51 0 - 0.9%

PHYSICAL STATE CODES

S - Solid
L - Liquid
G - Gas

HAZARD CATEGORY CODES

70 Fire hazard
69 Sudden release of pressure
68 Reactive
67 Immediate (acute) health hazard
66 Delayed (chronic) health hazard

INVENTORY RANGE CODES (In pounds)

20 Greater than 10 million
19 1,000,001 - 10 million
18 500,001 - 1 million
17 250,001 - 500,000
16 100,001 - 250,000
15 50,001 - 100,000
14 10,001 - 50,000
13 1,001 - 10,000
12 101 - 1,000
11 11 - 100
10 1 - 10
09 less than 1

CONTAINER CODES

50 Above ground tank
49 Below ground tank (steel)
48 Tank inside building
47 Steel drum
46 Can
45 Carboy
44 Silo
43 Fiber drum
42 Bag
41 Box
40 Cylinder
39 Bottles or jugs (glass)
38 Bottles or jugs (plastic)
37 Tote bin
36 Tank wagon
35 Railcar
34 Other (Describe)
33 Below ground tank (fiberglass)
32 Plastic drums

STORAGE CONDITION CODESPRESSURE

01 Ambient pressure
02 Greater than ambient pressure
03 Less than ambient pressure

TEMPERATURE

04 Ambient temperature
05 Greater than ambient temperature
06 Less than ambient temperature but not cryogenic (freezing conditions)
07 Cryogenic conditions (less than -200° C)

2800

MARAZITI, FALCON & GREGORY

A PROFESSIONAL ASSOCIATION
COUNSELLORS AT LAW

JOSEPH J. MARAZITI, JR.
CHRISTOPHER H. FALCON
JAMES R. GREGORY
LEAH C. HEALEY*

DIANE ALEXANDER†
MARK K. DOWDA

*ALSO MEMBER PA BAR
†ALSO MEMBER NY BAR
ΔALSO MEMBER DC BAR

65 MADISON AVENUE
MORRISTOWN, NEW JERSEY 07960

(201) 538-1221
TELECOPIER: (201) 538-4150

March 4, 1992

New Jersey Superfund Branch I
U.S. Environmental Protection Agency
26 Federal Plaza, Room 711
New York, New York 10278

Attention: Courtney McEnery, Project Manager

Re: Request for Information Under 42 U.S. C. Section 9601 et seq., and 42 U.S. C. Section 6901 et seq., Rockaway
Borough Well Field Site, Morris County, New Jersey

Dear Ms. McEnery:

In compliance with the continuing obligation of Multi-Form Metals, Inc. to supplement its response to the USEPA's Request for Information as additional information becomes available, enclosed please find an inventory prepared for Multi-Form Metals listing the chemicals located on the premises. Due to the volume of chemicals, a more complete submission is not available at this time, however, this will be submitted promptly upon completion.

If you have any questions or comments, please do not hesitate to call our office.

Very truly yours,

MARAZITI, FALCON & GREGORY

Diane Alexander
Diane Alexander

DA/bz
enc.

cc: Bruce Aber, Assistant Regional Counsel
David Landsittel

300192

MARAZITI, FALCON & GREGORY

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65 MADISON AVENUE
MORRISTOWN, NEW JERSEY 07960

(201) 538-1221
TELECOPIER: (201) 538-4150

February 6, 1992

New Jersey Superfund Branch I
U.S. Environmental Protection Agency
26 Federal Plaza, Room 711
New York, New York 10278

Attention: Courtney McEnery, Project Manager

Re: Request for Information Under 42 U.S. C. Section 9601 et
seq., and 42 U.S. C. Section 6901 et seq., Rockaway
Borough Well Field Site, Morris County, New Jersey

Dear Ms. McEnery:

Enclosed please find Answers to the Request for Information on
behalf of Multi-Form Metals, Inc. as per your letter of January 29,
1992.

If you have any questions or comments, kindly contact my office.

Very truly yours,

MARAZITI, FALCON & GREGORY

Diane Alexander

Diane Alexander

DA/bz
enc.

cc: Bruce Aber, Assistant Regional Counsel

300193

MASDEN INC.

PSW 2286A

Environmental Assurance Group, Inc.

Lanship, Complex • 180 Township Line Road • Hills Mend, NJ 08502 • (201) 874-7888

LAB PACK INVENTORY

A - AEROSOL L - LIQUID

S - SOLID

CHEMICAL NAME

SIZE/TYPE
CONTAINERNUMBER
OF CONT

✓ ① Garnet Grain #120 W	S	Quart - Metal	1
(Barton Mining Corp. North Creek, NY)			
- ② Sulfuric Acid 66° F	L	1/2 Gal. - Plastic	1
✓ ③ Inorganic Acid Flux #BB-176	L	Gallon - Plastic	1
(Corrosive: Superior Flux Mfg. Co. 95 Alpha Dr. Cleveland, OH)			
✓ ④ Ferric Chloride Sol.	L	Gallon - Plastic	1
✓ ⑤ Micro Lig Lab Cleaner (PH=9)	L	Quart - Plastic	1
- ⑥ Hydrochloric Acid 20°	L	1/2 Gal - Plastic	1
✓ ⑦ Marvel Mystery Oil Gas/Oil Additive. Lubricant Combust.	L	Pint - Metal	1
⑧ Hydrofluoric Acid	L	10 lb. - Plastic	1
- ⑨ Nitric Acid 40°	L	Gallon - Glass	1
✓ ⑩ Kester Solder - Water Soluble	L	Quart - Glass	1
(Organic Soldering Flux Formula 211)			
✓ ⑪ Bakelite Powder (Red)	S	5 lb. - Plastic	1
(Buehler Ltd 2120 Greenwood St. Evanston, IL 60204)			
- ⑫ #911 Carbon Remover	L	Pint - Plastic	1
(Fidelity Chem Products Inc. 470 Fidelity Way North, NJ)			
✓ ⑬ Cyanide Titrating Solution	L	6 oz. - Glass	1
- ⑭ Endox Titrating Solution	L	" "	1
✓ ⑮ Alpha Hydroxide Flux (Fkimm.) #830	L	" "	1
(Alpha Metals, Jersey City, NJ)			

R5W - 2286A

Environmental Assurance Group, Inc.

Longships Complex • 180 Township Line Road • Hightstown, NJ 08520 • (201) 876-7888

LAB PACK INVENTORY

A = AEROSOL

L = LIQUID

S = SOLID

CHEMICAL NAME

SIZE/TYPE
CONTAINERNUMBER
OF CONT.

1) Enstripo TL-106 (Ethanene Inc., West Haven, CT)	L	Pint - Glass	1
2) Buffer Solution pH 9.0 (Eaker)	L	"	1
1B) " " pH 5.0 "	L	"	1
3) Methyl Thymol Blue (Eaker)	S	5 gr. - Glass	1
4) Murexide, Monohydrate Powder (Eaker)	S	"	1
5) Murexide Tablets (Eaker)	S	"	1
6) Rodine 50 (Maxxon Industries)	L	Quart - Plastic	1
7) Oakite Surfdon 300 pH 3.5	L	"	1
8) Sodium Silicate 42% Sol.	L	Gallon - Metal	1
9) Klearall 54-I <small>Certified Sales Edgewater, NJ</small>	L	"	1
26) Micro Lig. Lab Cleaner	L	Pint - Plastic	1
7) Sulfuric Acid	L	9 lb. - Glass	1 ✓
8) Kester Soldering Flux (Flamm)	L	Gallon - Glass	1
29) " " " "	L	Quart - Plastic	1
30) " " " "	L	Pint - Plastic	3 ✓
31) Acetone	L	500ml - Glass	2
32) Rosin Flux	L	12 oz. - Plastic	1
33) " "	L	4 oz. - Glass	1
34) Pump Oil	L	Gallon - Plastic	1
35) Starch Indicator Sol. (Fisher)	L	Pint - Glass	2

RSC 2286A

Environmental Assurance Group, Inc.

Lunghips Complex • 180 Township Line Road • Belle Mead, NJ 08502 • (201) 874-7888

LAB PACK INVENTORY

L = LIQUID

S = SOLID

SIZE/TYPE
CONTAINERNUMBER
OF CON.

A: AEROSOL

CHEMICAL NAME

36	Potassium Iodide (Fisher)	S	125ml - Glass	1
37	Potassium Iodate	S	250ml - Glass	1
38	Potassium Dichromate	S	500ml - Glass	1
39	Potassium Trioxymuriate	S	250ml - Glass	1
40	Triethanolamine (Fisher)	L	Pint - Glass	1
41	Acetone 99.2 (Ethione, Inc. West Haven, C.T.)	S	Pint - Metal	2
42	Rosin Flux Soldering Flux (Aluma Metal)	L	Gallon - Plastic	1
	(Flamm) 701 Flux Reliance			
43	Metal Finishing Compound Strip Acid	S	2 lb - Plastic	1
	(Corrosive Mac Dermond, Inc. #328-AIE Waterbury, C.T.)			
44	Magnaflux Developer SKD-NFL-2P-9B	A	14 oz. - Metal	1
	(Contains acetylene chloride) (Magnaflux Corp. Chicago, IL)			
45	Magnaflux Spotcheck Penetrant	A	" " " "	1
	(SKL-HF/SKL-S Flux H. >190°) (Corrosive) (Magnaflux Corp. Chicago, IL)			
46	S-Tetra Bromoethane (Fisher)	L	Pint - Glass	4
47	2-Propanol (Flamm.)	L	500ml - Glass	1
48	Blueo-Tron-15 (Puron Bakeslee)	L	2 Gallon - Glass	1
	(Trichlorotrifluoroethane with IPA)			
49	S-Tetra Bromoethane	L	Gallon - Glass	1
50	Plastic Powder (Buehler)	S	1 lb - Plastic	1
51	Inhibited 1,1,1 Trichloroethane	L	Gallon - Metal	1
52	Ethylene Diamine (Fisher)	S	5 lb - Glass	1
	(Tetra-acetic acid)			

RSD 2286A

Environmental Assurance Group, Inc.

Longship Complex • 180 Township Line Road • Little Mend, NJ 08502 • (301) 874-7448

LAB PACK INVENTORY

A = AEZUSOL

L = LIQUID

S = SOLID

SIZE/TYPE
CONTAINERNUMBER
OF CONT

CHEMICAL NAME

(53) Ammonium Hydroxide	L	4 lb. Glass	1	
(54) Unknown Corrosive Solid	S	20 lb. Fiber	1	
(55) Ammonium Bifluoride	S	2-3 lb. Box Fiber	✓	✓
(56) Hydrofluoric Acid	L	Gallon - Plastic	1	✓
(57) Sodium Cyanide	S	5 lb. - Plastic	1	✓
(58) Glacial Acetic Acid	L	Qt - Plastic	1	
(59) Chromium Trioxide	L	Qt - Plastic	1	
(60) Copper Sulfate	S	Box - Plastic Bag	1	
(61) Inhibited Hydrochloric Acid (Rust and Scale Remover)	L	Gallon - Plastic	1	
(62) Reliance No. 563 - Cleaner (Solder Flux Remover Alpha Metals)	L	Gallon - Metal	1	
(63) Vacuum Pump Oil	L	Gallon - Metal	1	
(64) Ferric Chloride Solution	L	Gallon - Plastic	2	✓
(65) Potassium Permanganate (Oxidizer)	S	26 lb. - Fiber cont.	1	✓
(66) Sulfuric Acid	L	9 lb. - Glass	4	✓
(67) Ammonium Hydroxide	L	90 lb. Bottle ^{APC} 25 Gal	1	✓
(68) Copper Cyanide	S	70-90 lb. - Drum ^{25 Gal} 25 Gal	1	
(69) Dow Corning 1107 Fluid (100% Silicone Polymer ^{25 Gal} 25 Gal Flammable)	L	5 Gal. Plastic	1	

6- 5 GAL. CONTAINERS - LUBRICANT OIL FROM A COMPRESSOR
AND POSSIBLY SOME VACUUM PUMP OIL

12 OR 13 5 GAL. CONTAINERS - SPENT FLUOBORIC ACID

6 OR 7 5 GAL. CONTAINERS - VIRGIN FLUOBORIC ACID
MASON TO TRYING TO GET THE MFG. (CP CHEMICAL)
TO TAKE BACK IF NOT IT WILL BE PART OF THE
LAB PACK. WILL NOTIFY

MASON WILL APPLY FOR AN EPA NO.

**HAZARDOUS SUBSTANCE/WASTE
INFORMATION FROM MASDEN INDUSTRIES
APRIL 1993 ECRA SITE EVALUATION SUBMISSION FOR
ECRA CASE #93140**

300200



Supervisor _____

Technical Number _____

ADVANCED REMEDIAL TECHNOLOGIES, INC.

600 Upland Avenue
Upland, PA 19015NEW CUSTOMER ☐

In order that we can determine where the generator's hazardous waste material can be lawfully disposed of, we require that the Generator Waste Profile Sheet be filled out. Your cooperation in giving us this information will expedite the safe disposal of the waste material.

- GENERATOR NAME: MOSDEN INDUSTRIES EPA ID NO: PENDING
FACILITY ADDRESS: 20 ELN STREET, ROCKAWAY STATE: NY ZIP: 07866
BILLING ADDRESS: StW 115 Jacobs Ave., South Kew NY STATE: NY ZIP: 02032
- GENERATOR CONTACT:
BUSINESS: DAVID LADOSITSL TITLE: _____ PHONE: 201-625-3500
TECHNICAL: RANDY TITLE: Manager PHONE: 201-625-3952
- WASTE DESCRIPTION: Packaged Laboratory Chemicals
- PROCESS GENERATING WASTE: Lab Packaging of Chemicals
- VOLUME: A) PRESENT ACCUMULATION:
DRUMS: NUMBER 7 SIZE 55 gal. - PLC
NUMBER 3 SIZE 5 gal. - PLC
NUMBER 4 SIZE 55 gal. Bulk - used as containers
NUMBER 1 SIZE 30 gal. Bulk - poly drum
NUMBER 1 SIZE 30 gal. Bulk - poly drum
- DRUM CONTENTS (SEE ATTACHED SHEETS FOR ACTUAL PACKING LIST)

DRUM #	DOT DESCRIPTION	MAJOR COMPONENTS	DRUM #	DOT DESCRIPTION	MAJOR COMPONENTS
MI-A-01	Waste Acid, liquid, p.o.s.	H ₂ SO ₄ , HF (SS)	MI #11	(>112, less than 442) Waste Ammonium Hydroxide	BULK - 30 gal Poly
MI-FL-02	Waste Ammonia liquid, p.o.s.	Acetone, Alcoh (SS)	MI #12	Waste Copper Cyanide	BULK - 55 gal (AS)
MI-CHL-03	Waste OAM-A, p.o.s.	Chlorinated Solvents (SS)	MI #13	Waste Acid, liquid, p.o.s.	BULK - 20 gal Poly
MI-NIL-04	Chemical Process liquid, p.o.s.	Solvent mixture (SS)	MI #14	Waste Acid, liquid, p.o.s.	BULK - 55 gal (AS)
MI-OXS-05	Waste Oxidizer, p.o.s.	Potassium Permanganate (SS)	MI #15	Waste Acid, liquid, p.o.s.	BULK - 55 gal (AS)
MI-CS-06	Waste Corrosive Solid, p.o.s.	Ammonium Bifluoride (SS)	MI #16	Waste Compound, Cleaning, p.o.s.	BULK - 55 gal (AS)
MI-BHC-07	Chemical Process Solid, p.o.s.	Asbestos Slides (SS)			
MI-OXL-08	Waste Oxidizer, Corrosive liquid, p.o.s.	Nitric Acid (SS)			
MI-AM-09	Waste Corrosive liquid, p.o.s.	Trichloroethylene (SS)			
MI-CN-10	Waste Sodium Cyanide, (solid)	As is (SS)			

7. AUTHORIZED SIGNATURE: _____

PRINT NAME: RANDY COURSEN

TITLE: _____

DATE: 5/15/92

S & W WASTE PACKING LIST

Generator MASON INDUSTRIES
EPA ID # _____
Container Size/Type 55gal / 174
Container ID # MI- #16

DOT Ship Name Waste Compound CANNING
Hazard Class Corrosive Material
UN (NA) 1760 Hazard Type L, C
EPA Waste Code DOOR

Page 1 of 1

Inside Container			Chemical Name (No Formulas)	Physical State	HAZARD CLASS						
Quantity	Size	Type (M, G, PGP)			ORM	Water/Air- Reactive	Corrosive	Flammable	Poison	Oxidizer	Other
1	20 gal	fib	Plastic Linel - fiber Drum NOT SHIPPABLE								
			CONTAINS: "DS-9-333" STAINLESS STEEL DESCALER AND RAID REMOVER Diversey Chemicals Des Plaines, Illinois 60018"								
			Label SAYS: Strong Acidic Product Containing Hydrochloric Acid and 7.6% Phosphate								
			DRUM (1/5 FULL 3 gallons)								
			SHIPPED AS: Waste Compound, Cleaning N.O.S. Corrosive Material NA 1760								
			PER DAWG LAB/C SW may want to switch to Waste Acid, LIQUID, N.O.S. NA 1760								

S & W WASTE PACKING LIST

Generator MASON INDUSTRIES
 EPA ID # _____
 Container Size/Type 55gal / 17H
 Container ID # MT- #15

DOT Ship Name Waste Acid, LIQUID, N.O.S
 Hazard Class Corrosive Material
 UN 1760 Hazard Type L.C
 EPA Waste Code D0-2

Page 1 of 1

Inside Container			Chemical Name (No Formulas)	Physical State	HAZARD CLASS						
Quantity	Size	Type (M, G, PGP)			ORM	Water/Air- Reactive	Corrosive	Flammable	Poison	Oxidizer	Other
1	20gal	FIB	PLASTIC LINED - NOT SHIPPABLE OVERPACKED IN 55gal-17H (Almost Full)	L			✓				
			"RODINE 50" Anchem Products Inc. Ambler, PA	L			✓				
			Label Says CONTAINS: COAL TAR COMPOUNDS AND MINERAL ACIDS								
			Description: A Dk Amber Liquid pH 1 or less Stinging odor No Solids								

S & W WASTE PACKING LIST

Generator MASDEN INDUSTRIES
 EPA ID # _____
 Container Size/Type 174 ~~200~~ ~~55~~ ~~55~~ 55gal
 Container ID # MI- H 14

DOT Ship Name Wick Acid, liquid, n.o.s.
 Hazard Class Corrosive Material
 UN/NA 1760 Hazard Type L.C.
 EPA Waste Code D002

Page 1 of 1

Inside Container			Chemical Name (No Formulas)	Physical State	HAZARD CLASS						
Quantity	Size	Type (M, G, PGP)			ORM	Water/Air- Reactive	Corrosive	Flammable	Poison	Oxidizer	Other
1	200	P-4	CARBON - NOT SHIPPABLE OVERPACKED IN 55gal/174	L			✓				
			"IG I DSEALER"								
			Fidelity Chemical Products Corp.								
			470 Frelinghuysen Ave.								
			Newark, NJ 07114								
			AN Acidic Material								
			Corrosive labels on DRUM								
			PH 1 OR LESS								
			WARNINGS that causes Burns								
			Approx. 2 1/2 Full								

S & W WASTE PACKING LIST

Generator MASON INDUSTRIES
EPA ID # _____
Container Size/Type 20 gal Poly Craboy
Container ID # MI- #13

DOT Ship Name Waste Acid Liquid, n.o.
Hazard Class Corrosive Material
UN 1260 Hazard Type L.C.
EPA Waste Code D002

Page 1 of 1

Inside Container			Chemical Name (No Formulas)	Physical State	HAZARD CLASS						
Quantity	Size	Type (M, G, PCP)			ORM	Water/Air- Reactive	Corrosive	Flammable	Poison	Oxidizer	Other
1	20 gal	Poly	Acid CARB-Y - 1/4 Full only CLEAR SOLUTION PH 1 on test Odor of typical Inorganic Acid (Stinging) Probably Sulfuric or Hydrochloric DOT Approved Container in SHIPMAN's Condition BULK Item	L			✓				

S & W WASTE PACKING LIST

but n.c. than 442 among

Generator MASON INDUSTRIES

DOT Ship Name WASTE Ammonium Hydroxide

EPA ID # _____

Hazard Class Corrosive Material

Container Size/Type 30 Gal Poly.

UN~~DA~~ 2672 Hazard Type L.C.

Container ID # MI- B //

EPA Waste Code D002

Page 1 of 1[illegible]

S & W WASTE PACKING LIST

Generator MASON INDUSTRIES
EPA ID # _____
Container Size/Type 55 G PAIL
Container ID # MI-CYN-10

DOT Ship Name Waste Sodium Cyanide, soc
Hazard Class Poison B
(UN)NA 1689 Hazard Type S.H.R
EPA Waste Code P106, D003

Page 1 of 1[illegible]

S & W WASTE PACKING LIST

Generator MASON INDUSTRIES
EPA ID # _____
Container Size/Type 551 PAIL
Container ID # MI-AM-09

DOT Ship Name Waste Corrosive Liquid, p
Hazard Class Corrosive Material
UN/NA 1760 Hazard Type L.C.
EPA Waste Code D0-2

Page 1 of 1[illegible]

S & W WASTE PACKING LIST

Generator MASCOEN INDUSTRIES
EPA ID # _____
Container Size/Type 33 gal Pail
Container ID # MI-0XL-08

DOT Ship Name West Cold: 20, Corrosive Liquid
Hazard Class 8X1046 (Corrosive)
UN (NA) 9193 Hazard Type L I, C, E
EPA Waste Code D001, D002, D007

Page 1 of 1[illegible]

S & W WASTE PACKING LIST

Generator MASDEN INDUSTRIES
 EPA ID # _____
 Container Size/Type 55 Gall / 12H
 Container ID # MI-NHS-07

DOT Ship Name CHEMICAL PACIFIC SOLID
 Hazard Class DOT/RCRA Non-Hazardous
 UN/NA _____ Hazard Type S
 EPA Waste Code NJ X 910

Page 1 of 1

Inside Container			Chemical Name (No Formulas)	Physical State	HAZARD CLASS						
Quantity	Size	Type (M, G, PGP)			ORM	Water/Air- Reactive	Corrosive	Flammable	Poison	Oxidizer	Other
1	Big	fib	10g/l Fiber - Powdered Soap (Surfactant)	S							non-Regulate
1	20LB	P	BAG - Tested to be ORGANIC Salt - Neutral in water, but Soluble, Melts with Heat No odor. Believe it to be an Organic Acid - Possibly Ethylenediamine Tetraacetic Acid or Citric Acid	S							Non-Regulate
1	5g	G	Ethylenediamine Tetraacetic Acid (EDTA)	S							Non-Regulate
1	Pot	PL	Plastic Powder - NON-HAZ	S							"
2	oz	G	Dimethylglyoxime Powder	S							"
1	5g	G	Methylthymol Blue	S							"
2	5g	G	Murexide, Monohydrate Pwd. - Indicator	S							"
1	2 LB	P	"Strip Aid" - By MacDermid Called Manufacturer - Says it is Sodium meta Nitro Benzene Sulfonate	S							"
1	LB	P	CITRIC Acid	S							"
1	Box	P	BAG - ORGANIC Solid, N.O.S. - An organic Salt, melts in flame - H ₂ O Soluble Tested Negative on Oxidizer & CN ⁻ UNK, Protocol #12								

S & W WASTE PACKING LIST

Generator MASON INDUSTRIES
 EPA ID # _____
 Container Size/Type 55 gal / 174
 Container ID # MZ-CS-06

DOT Ship Name WASTE Corrosive Solid, n.o.
 Hazard Class Corrosive Material
 UNNA 1759 Hazard Type S C
 EPA Waste Code 0002

Page 1 of 1

Inside Container			Chemical Name (No Formulas)	Physical State	HAZARD CLASS						
Quantity	Size	Type (M, G, PGP)			ORM	Water/Air- Reactive	Corrosive	Flammable	Poison	Oxidizer	Other
1	2500	FIS	A Fluoride Salt - pH in Aq Solution 2-3	S			/				
1	LB	P	BAG - Copper Sulfate	S							Non-Regulated
1	4oz	P	Potassium Iodide	S							"
1	4oz	G	" "	S							"
1	2500	P	BAG - Ammonium Bifluoride	S			/				
2	LB	M	CAN - "ACTANE O B2" - Tested for Cyanide - Negative H ₂ O Soluble - pH in Solution is 2.4. Tested for Oxidizer - Negative. Estimate this material is a Bifluoride Compound product Called MANUFACTURER - Confined Fluoride + Chloride Salt Mixture	S			/				
1	gal	M	Sodium Silicate, SOLID (1/2 FULL) Dropped out of solution into Solid foam	S							Non-Regulated

S & W WASTE PACKING LIST

Generator MASDEN INDUSTRIES
EPA ID # _____
Container Size/Type 55 gal / 17H
Container ID # MI-0XS-05

DOT Ship Name WASTE Oxidizer, P.O.S.
Hazard Class: OXIDIZER
UNNA 1479 Hazard Type S, I, E
EPA Waste Code 2001, 2002

Page 1 of 1[illegible]

S & W WASTE PACKING LIST

Generator MASON INDUSTRIES
EPA ID # _____
Container Size/Type 55 gal / 17 H
Container ID # MI-PHL-04

DOT Ship Name CHEMICAL PROCESS LUBRON, N.O.
Hazard Class (DOT/ACAS NOW REGULATED)
UN/NA — Hazard Type L
EPA Waste Code MT X700

Page 1 of 1

Inside Container			Chemical Name (No Formulas)	Physical State	HAZARD CLASS						
Quantity	Size	Type (M, G, PGP)			ORM	Water/Air- Reactive	Corrosive	Flammable	Poison	Oxidizer	Other
1	5gal	M	Pail - "VYDAX 550 - Fluorotelomer Dispersion (1/2 full)	L							Non-Regulated
1	gal	M	ORGANIC LIQ - NON-HAZ, NON-FLAMM, NON-CORROSIVE - (UNK. Protocol #3) (Full)	L							non-Regulated
1	qt	P	(Full) - "HYDROCOTE D" - Industrial Coating Compound Tested NON-CORROSIVE NON-FLAMM. H ₂ O Soluble	L							Non-Regulated
1	1/2 qt	G	"Mildly Alkaline LIQ w/ Surfactants (SOAP Compound) pH 8-9 - See UNK. Protocol for #5	L							non-Regulated
1	gal	P	(1/2 Full) - Very Thick - SOAP Solution (SURFACTANT) - UNK. Protocol #2								

S & W WASTE PACKING LIST

Generator MASON INDUSTRIES
 EPA ID # _____
 Container Size/Type 55 gal / 13H
 Container ID # MI-CHL-03

DOT Ship Name WASTE ORM-A, U.O.S.
 Hazard Class ORM-A
 UN/NA 1693 Hazard Type L, T
 EPA Waste Code U226

Page 1 of 1

Inside Container			Chemical Name (No Formulas)	Physical State	HAZARD CLASS						
Quantity	Size	Type (M, G, PGP)			ORM	Water/Air- Reactive	Corrosive	Flammable	Poison	Oxidizer	Other
1	gal	M	"CHLOROTHENE SM" - Inhibited (Full) 1,1,1-Trichloroethane, U226	L	(A)						
1	gal	M	"KLEARALL SSI" - Chlorinated Solvent Blend, U.O.S. (Full)	L	(E)						
1	gal	M	"RELINOLV #563" - Cleaner + Rosin Flux Remover Chlorinated Solvent Blend (1/2 Full)	L	(E)						
1	gal	M	(Full) High Chlorinated Solvent Blend (UPK. Protocol #4)	L	(E)						
1	gal	G	(Full) "Blaco-TRON H-15" - Trichlorotrifluoroethane with Isopropyl Alcohol (NOL-Arma)	L	(E)						
1	gal	G	(Full) s-Tetra bromo ethane	L	(A)						
4	pt	G	" - s-Tetra bromoethane (see Acetylene Tetrabromide)								

S & W WASTE PACKING LIST

Generator MASDEN INDUSTRIES
 EPA ID # _____
 Container Size/Type 55gal - 1211
 Container ID # MT-A-01

DOT Ship Name Waste Acid, Liquid, N.O.S.
 Hazard Class Corrosive Material
 UN/NA 1760 Hazard Type C, T, C
 EPA Waste Code D002, U134, D008

Page 1 of 1

Inside Container			Chemical Name (No Formulas)	Physical State	HAZARD CLASS						
Quantity	Size	Type (M, G, PGP)			ORM	Water/Air- Reactive	Corrosive	Flammable	Poison	Oxidizer	Other
1	1/2 gal	PL	(PT) SULFURIC ACID, 66° Be	L			✓				
1	1/2 gal	PL	(1/2 M) Hydrochloric Acid, CONC.	L			✓				
1	gal	PL	(QT) "C-88 Rust & Scale Remover" - Hydrochloric Acid Solution	L			✓				
2	gal	P	(Full) Ferric Chloride Solution, 42° Be	L			✓				
1	gal	P	(PT) " " " "	L			✓				
1	gal	P	(1/2 Full) Hydrofluoric Acid, U134	L			✓				
1	gal	P	(Full) " " " "	L			✓				
1	QT	P	(Full) Glacial Acetic Acid	L			✓				
1	QT	P	(Full) "ORATE SURFACON 300" - Moderately Acidic Product - Contains Biodegradable Surfactants	L			✓				
1	gal	P	Acid Solder Flux (TIN (LEAD) FULL)	L			✓				Acid
2	QT	G	(Full) - Starch Indicator Solution	L							Non-Aqueous
1	PT	P	" - Buffer Solution, PH 5.0	L							"
1	350ml	G	"ENDOX" Titrating Solution UNK. Protocol #8 - Acid Solution	L			✓				
1	PT	P	"KUSTAP TL-106" - G/L - d Manufacturer - "ENMORE" - A 10% Fluoboric Acid Solution with 23% Formic Acid, 46% Sulfuric M. Nitro Benzene Sulfonate, 42% Thiourea - Shipped as an Acid, N.O.S.	L			✓				

S & W WASTE PACKING LIST

Generator MASON INDUSTRIES
 EPA ID # _____
 Container Size/Type 55gal - 174
 Container ID # MI-FL-02

DOT Ship Name Waste Flammable Liquid, n.o.s.
 Hazard Class Flammable Liquid
 UN/NA 1993 Hazard Type L, I, F
 EPA Waste Code D001, U002

Page 1 of 1

Inside Container			Chemical Name (No Formulas)	Physical State	HAZARD CLASS						
Quantity	Size	Type (M, G, PGP)			ORM	Water/Air- Reactive	Corrosive	Flammable	Poison	Oxidizer	Other
1	5gal	Met	(3gal) - Waste Oil + Transmission Fluid - Combustible	L							Combustible
1	5gal	Met	(2gal) - "Lacquer C9346" - Flamm	L				✓			
1	PT.	G	2-Propanol	L				✓			
2	PT	G	Acetone (U002)	L				✓			
1	1/2pt	G	"Garni" - Alcohol Based Skin Solution	L				✓			
1	PT.	G	"Kenco #220 Rosin Flux" Alcohol Base	L				✓			
1	3gal	G	"ALANA HYDROSOLV FLUXP38" - Labelled Flammable Mixture	L				✓			
1	PT.	P	Resin Solution - Acetone Based	L				✓			
1	PT.	P	Combustible Liquid - Hexene Soluble (Cons. Protocol #9)	L							Combustible
1	1/2PT	G	(1/2 full) - Flamm. Lq., N.O.S. - Alcohol Type Solution - Alcohol Soluble	L				✓			

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NJ000107609348937	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address NASDEN INDUSTRIES 22 South Park St. Montclair, NJ 07042		A. State Manifest Document Number NJA 1489540		B. State Generators ID 20 Elm St. Rockaway, NJ 07866	
4. Generator's Phone (201) 625-3500	5. Transporter 1 Company Name HEWLA ENTERPRISES, INC.	6. US EPA ID Number NJ000107609348937	C. State Trans. ID NJDEP572711477	D. Transporter's Phone 201-589-1600	E. State Trans. ID
7. Transporter 2 Company Name	8. US EPA ID Number	9. Designated Facility Name and Site Address SEW WASTE, INC. 105 Jacobus Avenue South Kearny, N.J. 07032	10. US EPA ID Number	F. Transporter's Phone	G. State Facility's ID
11. US DOT Description, including Proper Shipping Name, Hazard Class, and ID Number		H. Facility's Phone			
a. WASTE FLUOBORIC ACID RQ (D002) Corrosive Material UN 1775		XX10XKX20E130002			
b. NON-REGULATED MATERIAL		XX10XKX5F61X9000			
c. WASTE SULFURIC ACID RQ D002 Corrosive Material UN 1530		XX50XKX25G100002			
d.					
e. Additional Descriptions for Materials Listed Above Fluoboric Acid (40/58) Boric Acid (11/2) Water (20/40)(C/L)		Sulfuric Acid (96) Water (4) (C/L) Handling Codes for DTS see 1503 ABC			
f. Triethylene Glycol(99/100) Ethylene Glycol(0.1/0.5)(L)					
15. Special Handling Instructions and Additional Information EMERGENCY CONTACT & PHONE: Randy Courson(201)625-3500 SEW APPROVAL NO. G09673 a)003, b)005, c)004 004 is 1 gal pails, 003 is 30 gal					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name RANDY COURSEN		Signature <i>Randy Courson</i>		Month Day Year 10/28/97	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Anthony Savino		Signature <i>Anthony Savino</i>		Month Day Year 10/23/97	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator, Certification of receipt Printed/Typed Name Pam R. ...					
RECEIVED PENDING MANIFEST REVIEW & QUALITY CONTROL					
Signature <i>[Signature]</i>					
Month Day Year 10/28/97					

APPROVAL CODE 004
CUSTOMER # 009623
LSR # _____
B # _____
TECHNICAL REP. INITIALS smk

Use Ball Point Pen - Press Firmly

GENERATORS NAME MADSEN INDUSTRIES, INC.
MAILING ADDRESS 22 SOUTH PARK STREET, MANTICAIN NJ 07042
WASTE PICK-UP ADDRESS 20 ELM ST. ROCKAWAY, NJ 07866 EPA ID NO. NJD 001476092
TECH CONTACT RANDY COURSEN TECH CONTACT PHONE # (201) 625-3500 M.S.D.S. Attached YES ☒ NO ☐
COMMON NAME OF WASTE SULFURIC ACID
PROCESS GENERATING WASTE VIRGIN SULFURIC ACID NOT USED

D. TOXICITY CHARACTERISTIC

QDOR <input checked="" type="checkbox"/> NONE <input type="checkbox"/> MILD <input type="checkbox"/> STRONG <input type="checkbox"/> DESCRIBE _____ COLOR: _____		PHYSICAL STATE @ 70°F <input type="checkbox"/> SOLID <input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> POWDER <input type="checkbox"/> SEMI-SOLID <input type="checkbox"/> SINGLE PHASE <input type="checkbox"/> BI-LAYERED <input type="checkbox"/> MULTI-LAYERED		FLASH POINT (F.C.G.) LIQUIDS <input type="checkbox"/> <100 ACTUAL <input type="checkbox"/> 100-140 _____ <input type="checkbox"/> >140-200 _____ <input checked="" type="checkbox"/> <200 _____ IGNITABILITY (SOLIDS) <input type="checkbox"/> YES <input type="checkbox"/> NO		CORROSIVITY (pH) <input checked="" type="checkbox"/> <2.0 <input type="checkbox"/> > 2.01-5 <input type="checkbox"/> > 5.01-9 <input type="checkbox"/> > 9.01-12.50 <input type="checkbox"/> > 12.50 EXACT pH <u>9</u>	
PERCENT LIQUID/SOLID TOTAL SOLIDS % SUSPENDED SOLIDS % FREE LIQUIDS <u>10</u> % WATER %		REACTIVITY (PPM) TOTAL CYANIDES = <u>0</u> AMENABLE CYANIDES = <u>0</u> REACTIVE SULFIDES = <u>0</u> <input type="checkbox"/> WATER REACTIVE <input type="checkbox"/> AIR REACTIVE <input type="checkbox"/> SHOCK SENSITIVE <input type="checkbox"/> GENERATES TOXIC FUMES when mixed with H ₂ O, acid or base		FUELS/SOLVENTS BTU/LB _____ %HALOGEN _____ %ASH _____ %SULFUR _____ %BS&W <u>NA</u>		AQUEOUS TOTAL ORGANIC CARBON <input type="checkbox"/> < 1,000 mg/l <input type="checkbox"/> < 10,000 mg/l <input type="checkbox"/> < 25,000 mg/l <input type="checkbox"/> < 50,000 mg/l <input type="checkbox"/> < 100,000 mg/l EXACT _____	
SPECIFIC GRAVITY <input type="checkbox"/> < .8 <input checked="" type="checkbox"/> > 1.0-1.2 <input type="checkbox"/> .8-1 <input type="checkbox"/> > 1.2							

[illegible]

Contaminant	EPA HW No.1	CAS No.2	Regula- tory Level (mg/L)	Actual Level
Arsenic.....	D004	7440-38-2	5.0	ND
Barium.....	D005	7440-39-3	100.0	ND
Cadmium.....	D006	7440-43-9	1.0	ND
Chromium.....	D007	7440-47-3	5.0	ND
Lead.....	D008	7439-92-1	5.0	ND
Mercury.....	D009	7439-97-6	0.2	ND
Selenium.....	D010	7782-49-2	1.0	ND
Silver.....	D011	7440-22-4	5.0	ND
Benzene.....	D018	71-43-2	0.5	ND
Carbon tetrachloride	D019	56-23-5	0.5	ND
Chlordane.....	D020	57-74-9	0.03	ND
Chlorobenzene.....	D021	105-90-7	100.0	ND
Chloroform.....	D022	67-66-3	6.0	ND
o-Cresol.....	D023	95-48-7	*200.0	ND
m-Cresol.....	D024	108-39-4	*200.0	ND
p-Cresol.....	D025	106-44-5	*200.0	ND
Cresol.....	D026	*200.0	ND
2,4-D.....	D016	94-75-7	10.0	ND
1,4-Dichlorobenzene	D027	106-46-7	7.5	ND
1,2-Dichloroethane	D028	107-06-2	0.5	ND
1,1-Dichloroethylene	D029	75-35-4	0.7	ND
2,4-Dinitrotoluene	D030	121-14-2	*0.13	ND
Endrin.....	D012	72-20-8	0.02	ND
Heptachlor (and its hydroxide).	D031	76-44-8	0.008	ND
Hexachlorobenzene	D032	118-74-1	*0.13	ND
Hexachlorobutadiene.	D033	87-68-3	0.6	ND
Hexachloroethane.....	D034	67-72-1	3.0	ND
Lindane.....	D013	58-89-9	0.4	ND
Methoxychlor.....	D014	72-43-5	10.0	ND
Methyl ethyl ketone	D035	78-93-3	200.0	ND
Nitrobenzene.....	D036	98-95-3	2.0	ND
Pentachlorophenol	D037	87-86-5	100.0	ND
Pyridine.....	D038	110-86-1	*5.0	ND
Tetrachloroethylene	D039	127-18-4	0.7	ND
Toxaphene.....	D015	8001-35-2	0.5	ND
Trichloroethylene.....	D040	79-01-6	0.5	ND
2,4,5-Trichlorophenol.	D041	95-95-4	400.0	ND
2,4,6-Trichlorophenol.	D042	88-06-2	2.0	ND
2,4,5-TP (Silvex).	D017	93-72-1	1.0	ND
Vinyl chloride.....	D043	75-01-4	0.2	ND

- 1 Hazardous waste number.
- 2 Chemical abstracts service number.
- 3 Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.
- 4 If o-, m- and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total Cresol is 200 $\mu\text{mol/L}$.

PLEASE NOTE THE CHEMICAL COMPOSITION TOTAL IN THE MAXIMUM COLUMN MUST BE GREATER THAN OR EQUAL TO 100 PERCENT.



State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

300222

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NJ100986609949		Manifest Document No. 100949		2. Page 1 of 3		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address MASDEN INDUSTRIES 20 ELM ST., ROCKAWAY, NJ 07866						A. State Manifest Document Number NJA 1310948			
4. Generator's Phone (201) 625/3500						B. State Generator's ID SAFE			
5. Transporter 1 Company Name KEPONA ENTERPRISES, INC.						C. State Trans. ID NJ001572177			
7. Transporter 2 Company Name						D. Transporter's Phone (201) 589/1670			
9. Designated Facility Name and Site Address S. & W. WASTE, INC. 105 JACOBUS AVE. SMITH KEARNY, NJ 07032						E. State Trans. ID			
10. US EPA ID Number						F. Transporter's Phone			
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)						G. State Facility's ID			
12. Containers						H. Facility's Phone (201) 366/2004			
a. X SQ, WASTE ACID LIQUID, NOS CORROSIVE MATERIAL UN1760 (0002, EXCL. U134)						U 1 3 4 5 0 0 8 0 0 1 0 1			
b. X SQ, WASTE FLAMMABLE LIQUID, NOS FLAMMABLE LIQUID UN1993 (0301, EXCL. 0302)						U 9 0 2 0 0 1 0 1 1 5 0 0 0 1			
c. X SQ, WASTE ORG-A NOS ORG-A UN1693 (0226)						U 2 2 4 0 0 1 0 1 1 5 0 0 0 1			
d. X SQ, CHEMICAL PROCESS LIQUID, NOS NON-DOT NON-RCRA REGULATED X900						U 9 0 1 0 0 0 1 0 1 1 5 0 0 0 1			
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above			
L/C,T,E SEE PACKING SLIP L/T SEE PACKING SLIP						Handling Codes for Wastes Listed Above			
L/I,T SEE PACKING SLIP L SEE PACKING LIST						Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information A. MI-A-01 B. MI-PL-02 C. MI-CAL-03 D. MI-MHL-04 EMERGENCY CONTACT: RANDY COURSEN 201-625-3500									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name RANDY COURSEN						Signature <i>Randy Courson</i>		Month Day Year 11/17/92	
17. Transporter's Acknowledgement of Receipt of Materials						Printed/Typed Name David K. [unclear]		Signature <i>David K. [unclear]</i>	
18. Transporter 2 Acknowledgement of Receipt of Materials						Printed/Typed Name		Signature	
19. Discrepancy Indication Space						Printed/Typed Name		Signature	
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest and copies of this manifest to the appropriate authorities.									
Printed/Typed Name Tom K. [unclear]						Signature <i>Tom K. [unclear]</i>		Month Day Year 11/17/92	

RECEIVED PENDING MANIFEST REVIEW & QUALITY CONTROL

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)		21. Generator's US EPA ID No. NJD001476092	Manifest Document No. NJA1310948	22. Page 2 OF 3	Information in the shaded areas is not required by Federal law.	
23. Generator's Name MASHEN INDUSTRIES 20 ELM ST., ROACKAWAY, NJ 07866 201-625-3500				L. State Manifest Document Number 1310948		
24. Transporter Company Name HEROLA ENTERPRISES, INC.				25. US EPA ID Number NJD 986609949		
26. Transporter Company Name				27. US EPA ID Number		
				N. State Transporter's ID NJDEP ST27774204		
				O. Transporter's Phone 201-589-1600X		
				P. State Transporter's ID		
				Q. Transporter's Phone		
28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				29. Containers No.	30. Total Quantity	31. Unit Wt/Vol
a. <input checked="" type="checkbox"/> RQ, WASTE OXIDIZER NOS OXIDIZER UN1479 (D007) (D001)				0 0 1 D M	150	P
b. <input checked="" type="checkbox"/> RQ, WASTE CORROSIVE SOLID, NOS CORROSIVE MATERIAL UN1759 (D002)				0 0 1 D M	1 50	P
c. <input type="checkbox"/> WASTE CHEMICAL PROCESS SOLID NOS NON/RCRA NON/DOT REGULATED X910				0 0 1 D M	150	P
d. <input checked="" type="checkbox"/> RQ, WASTE OXIDIZER, CORROSIVE LIQUID, NOS OXIDIZER NA9193 (D001, D002, D007)				0 0 1 D M	15	P
e. <input checked="" type="checkbox"/> RQ, WASTE CORROSIVE LIQUID, NOS CORROSIVE MATERIAL UN1760 (D002)				0 0 1 D M	15	P
f. <input checked="" type="checkbox"/> RQ, WASTE SODIUM CYANIDE POISON B UN1689 (D003, P106)				0 0 1 D M	1 5	P
g. <input checked="" type="checkbox"/> RQ, WASTE AMMONIUM HYDROXIDE CORROSIVE MATERIAL UN1760 (D002)				0 0 1 D M	110	P
h. <input checked="" type="checkbox"/> RQ, WASTE COPPER CYANIDE POISON B UN1587 (D003, P029)				0 0 1 D M	150	P
i. <input checked="" type="checkbox"/> RQ, WASTE ACID LIQUID, NOS CORROSIVE MATERIAL UN1760 (D002)				0 0 1 D F	9 0	P
S. Additional Descriptions for Materials Listed Above				T. Handling Codes for Wastes Listed Above		
A. S/I, E SEE PACKING LIST				E. L/C SEE PACKING LIST		
B. S/C SEE PACKING LIST				F. S/H, R SEE PACKING LIST		
C. S SEE PACKING LIST				G. S/H, R SEE PACKING LIST		
D. L/I, C, E SEE PACKING LIST				H. S/H, R SEE PACKING LIST		
32. Special Handling Instructions and Additional Information				A. RI-OXS-05, B. RI-CS-06, C. RI-NHS-07, D. RI-OXL-08, E. RI-AM-09, F. RI-CYN-10, G. RI #11, H. RI #12, I. RI #13		
<input checked="" type="checkbox"/> TOX4 BLENDING <input checked="" type="checkbox"/> TOX5 TRANSFER <input checked="" type="checkbox"/> TOX4 BLENDING <input checked="" type="checkbox"/> TOX5 TRANSFER <input checked="" type="checkbox"/> TOX4 BLENDING <input checked="" type="checkbox"/> TOX5 TRANSFER				<input checked="" type="checkbox"/> TOX4 BLENDING <input checked="" type="checkbox"/> TOX5 TRANSFER <input checked="" type="checkbox"/> TOX4 BLENDING <input checked="" type="checkbox"/> TOX5 TRANSFER		
33. Transporter Acknowledgement of Receipt of Materials				Date		
Printed/Typed Name RANDY COURSEN				Signature Randy Cousen		Month Day Year 07/07/92
34. Transporter Acknowledgement of Receipt of Materials				Date		
Printed/Typed Name DONALD RUITENBERG				Signature DONALD RUITENBERG		Month Day Year 07/07/92
35. Discrepancy Indication Space				300223		

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)		21. Generator's US EPA ID No. NJ0001476092	Manifest Document No. NJA1310948	22. Page 3 of 3	Information in the shaded areas is not required by Federal law.	
23. Generator's Name MASDEN INDUSTRIES 20 ELM ST. ROCKAWAY, NJ 07866 201-625-3500				L. State Manifest Document Number 1310948		
24. Transporter Company Name KEROLA ENTERPRISES, INC.				25. US EPA ID Number N J D 9 8 6 6 0 9 9 4		
26. Transporter Company Name				27. US EPA ID Number		
				N. State Transporter's ID NJDEP 57277H20		
				O. Transporter's Phone 201-589-1600		
				P. State Transporter's ID		
				Q. Transporter's Phone		
28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				29. Containers No.	30. Total Quantity	31. Unit Wt/Vol
a. <input checked="" type="checkbox"/> RQ, WASTE ACID LIQUID, NOS CORROSIVE MATERIAL UN1760 (D002)				0 0 1	D F	150 P D002
b. <input checked="" type="checkbox"/> RQ, WASTE ACID LIQUID, NOS CORROSIVE MATERIAL UN1760 (D002)				0 0 1	D M	150 P D002
c. <input checked="" type="checkbox"/> RQ, WASTE COMPOUND, CLEANING NOS CORROSIVE MATERIAL UN1760 (D002)				0 0 1	D M	150 P D002
d. <input checked="" type="checkbox"/> RQ, WASTE CORROSIVE LIQUID NOS CORROSIVE MATERIAL UN1760 (D002)				0 1 8	D M	630 P D002
e.						
f.						
g.						
h.						
i.						
S. Additional Descriptions for Materials Listed Above				T. Handling Codes for Wastes Listed Above		
A. L/C SEE PACKING LIST RI #14				a) TO 4 Blending		
B. L/C SEE PACKING LIST RI #15				b) TO 4 Blending		
C. L/C SEE PACKING LIST RI #16				c) TO 4 Blending		
D. L/C SEE PACKING LIST RI #17 RI #34				d) SO5 Transfer		
32. Special Handling Instructions and Additional Information						
GENERATOR						
33. Transporter Acknowledgement of Receipt of Materials						Date
Printed/Typed Name RANDY COURSEN						Month Day Year 07/07/92
Signature <i>Randy Courson</i>						
34. Transporter Acknowledgement of Receipt of Materials						Date
Printed/Typed Name DONALD RUITENBERG						Month Day Year 07/07/92
Signature <i>Donald Ruitenber</i>						
35. Discrepancy Indication Space						
300224						

ATTACHMENT 4

**ANALYTICAL RESULTS FOR SAMPLES COLLECTED BY
NJDEP AT F.G. CLOVER**

300225



300226

Technical Report
for
NJDEP
CONTRACT X-085

Chain of Custody Data Required for ETC Data Management Summary Reports

P2316	NJDEP	NJDEP	PM005	861009	1515	
ETC Sample No.	Company	Facility	Sample Point	Date	Time	Elapsed Hours



John J. Fitzgerald
Vice President
Research and Operations

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Appendix: Preliminary Data (if applicable)	

SAMPLE NARRATIVE

General Information Section

This report contains the required deliverables for sample PM005 as identified by client and to be analyzed according to Task II with Tier II deliverables as detailed in NJDEP Contract X-085. For Tier I deliverables, all required information common to multiple samples is contained in a separate standards package and appendices volume. This deliverables package is prepared according to the RFP guidelines and as amended from the March 6, 1986 meeting between NJDEP and ETC representatives.

Data Qualifiers

Qualifiers used by CLP protocols are not applicable to our database tables. However, this data is available in this package in the form detailed below.

- U. - Indicates none detected. Table of results uses ND instead of qualifier.
- B. - Indicates target compound found in blank. This information can be observed by comparing "Sample Concentration" column with "Blank Data" column on the sample results table.
- J. - Indicates estimated value. This information can be obtained by comparing "Sample Concentration" column with "Method Detection Limit (MDL)" in the next column. On CLP Form 1 tables, "J" is used to indicate values below detection limit. Note that "J" is also used by CLP to indicate that tentative identified compounds are estimates.

Sample Extraction

NJDEP required methodologies provide for a variety of extraction cleanups to enhance sensitivity and provide for easier analysis of complex matrices. At NJDEP's request, per March 6, 1986, ETC will not routinely use Gel Permeation Chromatography (GPC) cleanup on Task III and Task IV samples. Since GPC is a standard cleanup procedure for all soils at ETC, some samples may require GPC cleanup, in which case, comments to this will be included here. NJDEP has been informed that omitting this clean-up procedure may result in higher detection limits and poor MS/MSD recoveries.

Instrument Analysis/Review

Calibration (initial and continuing) is accomplished according to X-085 requirements. It should be noted that a number of target compounds including (but not limited to) nitrosodimethylamine, benzidine, 4-nitrophenol, purgeable gasses etc., will not consistently be within the requested 30% RSD. This is not a reflection on analysis but on the behavior of the compounds in general.

Note: For all target compounds which are not a CCC or SPCC, where the %RSD exceeds 30%, client may wish to qualify data.

In addition, compounds including (but not limited to) methylene chloride, acetone, methyl ethyl ketone, and phthalate esters are common laboratory contaminants which may cause %RSD to be greater 30%.

Additional unidentified peaks were observed in Pesticides/PCB analysis.

300228

Comments on Specific Fractions

Volatile Organics: During the data review process, it was observed that the sample appeared to have been analyzed at a concentration too dilute (1:100) considering the concentration reported for Methylene Chloride, which was the only compound detected in this sample. Our Analyst attempted to analyze this sample at a higher concentration. However, due to the presence of matrix interference (higher boiler compounds), no results could be obtained for the 1:10 dilution. Results reported therefore, are from the 1:100 dilution.

Base/Neutral/Acid: This sample was originally extracted on 10/17/86 in our QC Batch 5844. Subsequent analysis revealed that apparently, the incorrect spiking solution was used during sample preparation. This spiking solution contained only the compounds required for the EPA/IFB protocol. As a result, this sample required re-extraction. However, since this sample was also used for the B/N/A matrix spike/matrix spike duplicate, insufficient volume remains for re-extraction. We can, therefore, provide only MS/MSD data for the EPA/IFB spiked compounds for this sample.

"This report and all associated data relevant to processing this sample has been reviewed by the QC group of ETC and found to conform (except as noted above) to the requirements outlined in the current version of the NJTASK protocol and/or the most recent CLP protocol (whichever is applicable) as interpreted by ETC."

Signature: _____

R. F. Smith

Date: _____

11/2/86

Results and Supportive Sample Data

300230

ETCENVIRONMENTAL
TESTING and CERTIFICATION

OCT 21, 1986

TABLE 1: QUANTITATIVE RESULTS and QUALITY ASSURANCE DATA**Volatile Compounds - GC/MS Analysis Data (QR01)**

300231

Chain of Custody Data Required for ETC Data Management Summary Reports

P2316

NJDEP

NJDEP

PM005

861009 1515

ETC Sample No.

Company

Facility

Sample Point

Date

Time

Elapsed
Hours

NPDES Number	Compound <small>Acrolein and Acrylonitrile values are given only.</small>	Results		QC Replicate		QC Blank and Spiked Blank			QC Matrix Spike		
		Sample Concn. ug/l	MDL ug/l	First ug/l	Second ug/l	Blank Data ug/l	Concn. Added ug/l	% Recov	Unspiked Sample ug/l	Concn. Added ug/l	% Recov
1V Acrolein		ND	10000	784	772	ND	-	-	ND	800	98
2V Acrylonitrile		ND	10000	75.0	73.7	ND	-	-	ND	80.0	94
3V Benzene		ND	440	49.6	49.7	ND	-	-	ND	50.0	99
4V bis(Chloromethyl)ether		ND	1000	ND	ND	ND	-	-	ND	0	-
5V Bromoform		ND	470	47.6	47.6	ND	-	-	ND	50.0	95
6V Carbon tetrachloride		ND	280	47.6	47.9	ND	-	-	ND	50.0	95
7V Chlorobenzene		ND	600	49.2	48.8	ND	-	-	ND	50.0	98
8V Chlorodibromomethane		ND	310	50.5	49.7	ND	-	-	ND	50.0	101
9V Chloroethane		ND	1000	45.7	41.7	ND	-	-	ND	50.0	91
10V 2-Chloroethylvinyl ether		ND	1000	48.6	47.6	ND	-	-	ND	50.0	97
11V Chloroform		ND	160	51.2	49.9	ND	-	-	ND	50.0	102
12V Dichlorobromomethane		ND	220	48.5	47.7	ND	-	-	ND	50.0	97
13V Dichlorodifluoromethane		ND	1000	47.2	43.4	ND	-	-	ND	50.0	94
14V 1,1-Dichloroethane		ND	470	49.7	49.8	ND	-	-	ND	50.0	99
15V 1,2-Dichloroethane		ND	280	50.1	49.0	ND	-	-	ND	50.0	100
16V 1,1-Dichloroethylene		ND	280	49.2	49.0	ND	-	-	ND	50.0	98
17V 1,2-Dichloropropane		ND	600	48.8	48.7	ND	-	-	ND	50.0	98
18V cis-1,3-Dichloropropylene		ND	500	51.3	50.5	ND	-	-	ND	50.0	102
19V Ethylbenzene		ND	720	49.1	48.7	ND	-	-	ND	50.0	98
20V Methyl bromide		ND	1000	69.3	43.8	ND	-	-	ND	50.0	139
21V Methyl chloride		ND	1000	45.7	45.6	ND	-	-	ND	50.0	91
22V Methylene chloride		1510	280	85.6	53.3	2.9	-	-	13.7	50.0	144
23V 1,1,2,2-Tetrachloroethane		ND	690	55.0	48.5	ND	-	-	ND	50.0	110
24V Tetrachloroethylene		ND	410	48.0	48.5	ND	-	-	ND	50.0	96
25V Toluene		ND	600	49.2	48.9	ND	-	-	ND	50.0	98
26V 1,2-Trans-dichloroethylene		ND	160	49.4	49.6	ND	-	-	ND	50.0	99
27V 1,1,1-Trichloroethane		ND	380	49.0	48.0	ND	-	-	ND	50.0	98
28V 1,1,2-Trichloroethane		ND	500	51.4	51.1	ND	-	-	ND	50.0	103
29V Trichloroethylene		ND	190	44.7	50.5	ND	-	-	ND	50.0	89
30V Trichlorofluoromethane		ND	1000	58.4	55.1	ND	-	-	ND	50.0	117
31V Vinyl chloride		ND	1000	45.5	42.7	ND	-	-	ND	50.0	91
18V trans-1,3-Dichloropropylene		ND	1000	49.2	48.4	ND	-	-	ND	50.0	98

A Recovery variable due to sample matrix interference.

Relative Percent Difference (RPD) for VOA

P2316 NJDEP
Job Number Account Name

NJDEP PM005
Facility Source

861009 1515 0
Date Time

RPD Equation : $RPD = (|(REP1 - REP2)| * 2 / (REP1 + REP2)) * 100$

Parameter	REP 1 ug/l	REP 2 ug/l	RPD
Acrolein	784	772	2
Acrylonitrile	75	74	2
Benzene	50	50	.3
bis(Chloromethyl)ether	ND	ND	0
Bromoform	48	48	.1
Carbon tetrachloride	48	48	.8
Chlorobenzene	49	49	.8
Chlorodibromomethane	50	50	2
Chloroethane	46	42	9
2-Chloroethylvinyl ether	49	48	2
Chloroform	51	50	3
Dichlorobromomethane	48	48	2
Dichlorodifluoromethane	47	43	8
1,1-Dichloroethane	50	50	.3
1,2-Dichloroethane	50	49	2
1,1-Dichloroethylene	49	49	.5
1,2-Dichloropropane	49	49	.2
cis-1,3-Dichloropropylene	51	51	2
Ethylbenzene	49	49	.9
Methyl bromide	69	44	45
Methyl chloride	46	46	.4
Methylene chloride	86	53	47
1,1,2,2-Tetrachloroethane	55	49	13
Tetrachloroethylene	48	48	.9
Toluene	49	49	.5
1,2-Trans-dichloroethylene	49	50	.5
1,1,1-Trichloroethane	49	48	2
1,1,2-Trichloroethane	51	51	.4
Trichloroethylene	45	51	12
Trichlorofluoromethane	58	55	6
Vinyl chloride	46	43	6
trans-1,3-Dichloropropylene	49	48	2

300232

November 18, 1986

TABLE 1: QUALITATIVE RESULTS

Tentatively Identified Organic Compounds - GC/MS Analysis Data - Volatile Fraction (QR06)

Chain of Custody Data Required For ETC Data Management Summary Reports					
P2316	NJDEP	NJDEP	PM005	861009	1515
ETC Sample No.	Company	Facility	Sample Point	Date	Time Elapsed Hours

[illegible]

300233

TABLE 1: QUALITATIVE RESULTS

Tentatively Identified Organic Compounds - GC/MS Analysis Data - Volatile Fraction (QR06)

Chain of Custody Data Required for ETC Data Management Summary Reports

QC5693 BLANK

ETC Sample No.

Company

Facility

Sample Point

Date

Time

Elapsed
Hours

Compound Name	Data			Identifiers				
	Scan Number	Retention Time (Min)	M.W.	CAS Number	Empirical Formula			
None found								

ETCENVIRONMENTAL
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NOV 17, 1986

TABLE 1: QUANTITATIVE RESULTS and QUALITY ASSURANCE DATA**Acid Compounds - GC/MS Analysis Data (QR02)**

300235

Chain of Custody Data Required for ETC Data Management Summary Reports

P2316 NJDEP

NJDEP

PM005

861009 1515

ETC Sample No.

Company

Facility

Sample Point

Date

Time

Elapsed
Hours

NPDES Number	Compound	Results		QC Replicate		QC Blank and Spiked Blank			QC Matrix Spike		
		Sample Concen. ug/l	MDL ug/l	First ug/l	Second ug/l	Blank Data ug/l	Concen. Added ug/l	% Recov	Unspiked Sample ug/l	Concen. Added ug/l	% Recov
1A	2-Chlorophenol	ND	7.0	184	153	ND	-	-	ND	222	83
2A	2,4-Dichlorophenol	ND	5.7	ND	ND	ND	-	-	ND	0	-
3A	2,4-Dimethylphenol	ND	5.7	ND	ND	ND	-	-	ND	0	-
4A	4,6-Dinitro-o-cresol	ND	51	ND	ND	ND	-	-	ND	0	-
5A	2,4-Dinitrophenol	ND	89	ND	ND	ND	-	-	ND	0	-
6A	2-Nitrophenol	ND	7.7	ND	ND	ND	-	-	ND	0	-
7A	4-Nitrophenol	ND	5.1	84.5	114	ND	-	-	ND	222	38
8A	p-Chloro-m-cresol	ND	6.4	192	144	ND	-	-	ND	222	86
9A	Pentachlorophenol	ND	7.7	223	305	ND	-	-	ND	222	100
10A	Phenol	ND	3.2	102	83.4	ND	-	-	ND	222	46
11A	2,4,6-Trichlorophenol	ND	5.7	ND	ND	ND	-	-	ND	0	-

A See comments.

Relative Percent Difference (RPD) for ACID

P2318 NJDEP
Job Number Account Name

NJDEP PM005
Facility Source

861009 1515 0
Date Time

RPD Equation : $RPD = (|(REP1 - REP2)| * 2 / (REP1 + REP2)) * 100$

Parameter	REP 1 ug/l	REP 2 ug/l	RPD
2-Chlorophenol	184	153	18
2,4-Dichlorophenol	ND	ND	0
2,4-Dimethylphenol	ND	ND	0
4,6-Dinitro-o-cresol	ND	ND	0
2,4-Dinitrophenol	ND	ND	0
2-Nitrophenol	ND	ND	0
4-Nitrophenol	84	114	30
p-Chloro-m-cresol	192	144	28
Pentachlorophenol	223	305	31
Phenol	102	83	20
2,4,6-Trichlorophenol	ND	ND	0

300236

ETC

ENVIRONMENTAL
TESTING and CERTIFICATION

TABLE 1: QUANTITATIVE REQUIREMENTS

ETCENVIRONMENTAL
TESTING and CERTIFICATION

NOV 17, 1986

TABLE 1: QUANTITATIVE RESULTS and QUALITY ASSURANCE DATA**BASE/NEUTRAL COMPOUNDS - GC/MS ANALYSIS DATA (QR03)**

300237

Chain of Custody Data Required for ETC Data Management Summary Reports

P2316 NJDEP

NJDEP

PM005

861009 1515

ETC Sample No.

Company

Facility

Sample Point

Date

Elapsed
Time Hours

NPDES Number	Compound	Results		QC Replicate		QC Blank and Spiked Blank			QC Matrix Spike		
		Sample Concn. ug/l	MDL ug/l	First ug/l	Second ug/l	Blank Data ug/l	Concn. Added ug/l	% Recov	Unspiked Sample ug/l	Concn. Added ug/l	% Recov
1B	Acenaphthene	ND	4.0	99.7	104	ND	-	-	ND	111	90
2B	Acenaphthylene	ND	7.4	ND	ND	ND	-	-	ND	0	-
3B	Anthracene	ND	4.0	ND	ND	ND	-	-	ND	0	-
4B	Benzidine	ND	94	ND	ND	ND	-	-	ND	0	-
5B	Benzo(a)anthracene	ND	17	ND	ND	ND	-	-	ND	0	-
6B	Benzo(a)pyrene	ND	5.3	ND	ND	ND	-	-	ND	0	-
7B	Benzo(b)fluoranthene	ND	21	ND	ND	ND	-	-	ND	0	-
8B	Benzo(ghi)perylene	ND	8.7	ND	ND	ND	-	-	ND	0	-
9B	Benzo(k)fluoranthene	ND	7.4	ND	ND	ND	-	-	ND	0	-
10B	bis(2-Chloroethoxy)methane	ND	11	ND	ND	ND	-	-	ND	0	-
11B	bis(2-Chloroethyl) ether	ND	12	ND	ND	ND	-	-	ND	0	-
12B	bis(2-Chloroisopropyl) ether	ND	12	ND	ND	ND	-	-	ND	0	-
13B	bis(2-Ethylhexyl)phthalate	80.7	21	ND	ND	ND	-	-	ND	0	-
14B	4-Bromophenyl phenyl ether	ND	4.0	ND	ND	ND	-	-	ND	0	-
15B	Butyl benzyl phthalate	33.2	21	ND	ND	ND	-	-	ND	0	-
16B	2-Chloronaphthalene	ND	4.0	ND	ND	ND	-	-	ND	0	-
17B	4-Chlorophenyl phenyl ether	ND	8.9	ND	ND	ND	-	-	ND	0	-
18B	Chrysene	ND	5.3	ND	ND	ND	-	-	ND	0	-
19B	Dibenzo(a,h)anthracene	ND	21	ND	ND	ND	-	-	ND	0	-
20B	1,2-Dichlorobenzene	ND	4.0	ND	ND	ND	-	-	ND	0	-
21B	1,3-Dichlorobenzene	ND	4.0	ND	ND	ND	-	-	ND	0	-
22B	1,4-Dichlorobenzene	ND	9.4	86.0	91.6	ND	-	-	ND	111	77
23B	3,3'-Dichlorobenzidine	ND	35	ND	ND	ND	-	-	ND	0	-
24B	Diethyl phthalate	ND	21	ND	ND	ND	-	-	ND	0	-
25B	Dimethyl phthalate	ND	21	ND	ND	ND	-	-	ND	0	-
26B	Di-n-butyl phthalate	ND	21	82.0	103	ND	-	-	ND	111	74
27B	2,4-Dinitrotoluene	ND	12	103	124	ND	-	-	ND	111	93
28B	2,6-Dinitrotoluene	ND	4.0	ND	ND	ND	-	-	ND	0	-
29B	Di-n-octyl phthalate	ND	21	ND	ND	ND	-	-	ND	0	-
30B	1,2-Diphenylhydrazine	ND	21	ND	ND	ND	-	-	ND	0	-
31B	Fluoranthene	ND	4.7	ND	ND	ND	-	-	ND	0	-
32B	Fluorene	ND	4.0	ND	ND	ND	-	-	ND	0	-

ETCENVIRONMENTAL
TESTING and CERTIFICATION

NOV 17, 198

TABLE 1: QUANTITATIVE RESULTS and QUALITY ASSURANCE DATA**BASE/NEUTRAL COMPOUNDS - GC/MS ANALYSIS DATA (QR03)**

300238

Chain of Custody Data Required for ETC Data Management Summary Reports

P2316 NJDEP

NJDEP

PM005

861009 1515

ETC Sample No.

Company

Facility

Sample Point

Date

Time

Elapsed
Hours

NPDES Number	Compound	Results		QC Replicate		QC Blank and Spiked Blank			QC Matrix Spike		
		Sample Concn. ug/l	MDL ug/l	First ug/l	Second ug/l	Blank Data ug/l	Concn. Added ug/l	% Recov	Unspiked Sample ug/l	Concn. Added ug/l	Recov
338	Hexachlorobenzene	ND	4.0	ND	ND	ND	-	-	ND	0	-
348	Hexachlorobutadiene	ND	1.9	ND	ND	ND	-	-	ND	0	-
358	Hexachlorocyclopentadiene	ND	21	ND	ND	ND	-	-	ND	0	-
368	Hexachloroethane	ND	3.4	ND	ND	ND	-	-	ND	0	-
378	Indeno(1,2,3-c,d)pyrene	ND	10	ND	ND	ND	-	-	ND	0	-
388	Isophorone	ND	4.7	ND	ND	ND	-	-	ND	0	-
398	Naphthalene	5980	3.4	ND	ND	ND	-	-	ND	0	-
408	Nitrobenzene	ND	4.0	ND	ND	ND	-	-	ND	0	-
418	N-Nitrosodimethylamine	ND	21	ND	ND	ND	-	-	ND	0	-
428	N-Nitrosodi-n-propylamine	ND	21	109	125	ND	-	-	ND	111	98
438	N-Nitrosodiphenylamine	ND	4.0	ND	ND	ND	-	-	ND	0	-
448	Phenanthrene	ND	11	ND	ND	ND	-	-	ND	0	-
458	Pyrene	ND	4.0	97.9	92.4	ND	-	-	ND	111	88
468	1,2,4-Trichlorobenzene	ND	4.0	86.7	93.5	ND	-	-	ND	111	78

A See comments.

Relative Percent Difference (RPD) for B/N

P2316 NJDEP
Job Number Account Name

NJDEP PM005
Facility Source

861009 1515 0
Date Time

RPD Equation : $RPD = (|(REP1 - REP2)| * 2 / (REP1 + REP2)) * 100$

Parameter	REP 1 ug/l	REP 2 ug/l	RPD
Acenaphthene	100	104	5
Acenaphthylene	ND	ND	0
Anthracene	ND	ND	0
Benztidine	ND	ND	0
Benzo(a)anthracene	ND	ND	0
Benzo(a)pyrene	ND	ND	0
Benzo(b)fluoranthene	ND	ND	0
Benzo(ghi)perylene	ND	ND	0
Benzo(k)fluoranthene	ND	ND	0
bis(2-Chloroethoxy)methane	ND	ND	0
bis(2-Chloroethyl) ether	ND	ND	0
bis(2-Chloroisopropyl)ether	ND	ND	0
bis(2-Ethylhexyl)phthalate	ND	ND	0
4-Bromophenyl phenyl ether	ND	ND	0
Butyl benzyl phthalate	ND	ND	0
2-Chloronaphthalene	ND	ND	0
4-Chlorophenyl phenyl ether	ND	ND	0
Chrysene	ND	ND	0
Dibenzo(a,h)anthracene	ND	ND	0
1,2-Dichlorobenzene	ND	ND	0
1,3-Dichlorobenzene	ND	ND	0
1,4-Dichlorobenzene	88	92	6
3,3'-Dichlorobenzidine	ND	ND	0
Diethyl phthalate	ND	ND	0
Dimethyl phthalate	ND	ND	0
Di-n-butyl phthalate	82	103	23
2,4-Dinitrotoluene	103	124	18
2,6-Dinitrotoluene	ND	ND	0
Di-n-octyl phthalate	ND	ND	0
1,2-Diphenylhydrazine	ND	ND	0
Fluoranthene	ND	ND	0
Fluorene	ND	ND	0
Hexachlorobenzene	ND	ND	0
Hexachlorobutadiene	ND	ND	0
Hexachlorocyclopentadiene	ND	ND	0
Hexachloroethane	ND	ND	0
Indeno(1,2,3-c,d)pyrene	ND	ND	0
Isophorone	ND	ND	0
Naphthalene	ND	ND	0
Nitrobenzene	ND	ND	0
N-Nitrosodimethylamine	ND	ND	0
N-Nitrosodi-n-propylamine	109	125	14

300239

Relative Percent Difference (RPD) for B/N

P2316 NJDEP
Job Number Account Name

NJDEP PM005
Facility Source

861009 1515 0
Date Time

RPD Equation : $RPD = (|(REP1 - REP2)| * 2 / (REP1 + REP2)) * 100$

Parameter	REP 1 ug/l	REP 2 ug/l	RPD
N-Nitrosodiphenylamine	ND	ND	0
Phenanthrene	ND	ND	0
Pyrene	98	92	8
1,2,4-Trichlorobenzene	87	93	8

300240

November 18, 1986

TABLE 1: QUALITATIVE RESULTS

Tentatively Identified Organic Compounds - GC/MS Analysis Data - B/N/A Fraction (QR08)

Chain of Custody Data Required for ETC Data Management Summary Reports						
P2316	NJDEP	NJDEP	PM005	861009	1515	Elapsed Hours
ETC Sample No.	Company	Facility	Sample Point	Date	Time	

300241

Compound Name	Data			Identifiers		Estimated Concen. ug/l	
	Scan Number	Retention Time (Min)	M.W.	CAS Number	Empirical Formula		
1 Benzene, methyl*	11	2.51	92	108883	C ₇ H ₈	129	
2 Unknown*	110	4.52	-	-	-	151	
3 Heptane, 2,6-dimethyl	144	5.22	-	1072055	-	184	
4 Unknown	153	5.40	-	-	-	94	
5 Alkane	196	6.28	-	-	C _n H _{2n+2}	2560	
6 Unknown	210	6.56	-	-	-	85	
7 Unknown	220	6.76	-	-	-	217	
8 Unknown	228	6.93	-	-	-	406	
9 Alkane	235	7.07	-	-	-	294	
10 Unknown	241	7.19	-	-	-	1150	
11 Benzene, ethyl-methyl	271	7.81	120	-	C ₉ H ₁₂	1580	
12 Unknown	249	7.36	-	-	-	698	
13 Unknown	284	8.07	-	-	-	4030	
14 Unknown	336	9.13	-	-	-	7740	
15 Unknown	522	12.94	-	-	-	875	

TABLE 1: QUALITATIVE RESULTS

Tentatively Identified Organic Compounds - GC/MS Analysis Data - B/N/A Fraction (QR08)

Chain of Custody Data Required for ETC Data Management Summary Reports

P2316	NJDEP	NJDEP	PM005	861009	1515	Elapsed
ETC Sample No.	Company	Facility	Sample Point	Date	Time	Hours

Compound Name	Data			Identifiers				
	Scan Number	Retention Time (Min)	M.W.	CAS Number	Empirical Formula	Estimated Concent. ug/l		
16 Unknown	525	13.00	-	-	-	767		
17 Unknown	550	13.51	-	-	-	4840		
18 Unknown	562	13.76	-	-	-	1800		
19 Unknown	566	13.84	-	-	-	592		
20 Unknown	578	14.08	-	-	-	494		
21 Unknown	585	14.23	-	-	-	447		
22 Unknown	589	14.31	-	-	-	937		
23 Unknown	594	14.41	-	-	-	446		
24 Unknown	599	14.51	-	-	-	978		
25 Unknown	606	14.66	-	-	-	1400		
26 Naphthalene, methyl	620	14.94	142	-	C ₁₁ H ₁₀	1180		
27 Unknown	629	15.13	-	-	-	1400		

*Compound also present in the Blank.

November 18, 1986

TABLE 1: QUALITATIVE RESULTS

Tentatively Identified Organic Compounds - GC/MS Analysis Data - B/N/A Fraction (QR08)

Chain of Custody Data Required for ETC Data Management Summary Reports

QC5844 - BLANK

Company

Facility

Sample Point

Date

Time

Elapsed
Hours

Compound Name	Data			Identifiers				
	Scan Number	Retention Time (Min)	M.W.	CAS Number	Empirical Formula	Estimated Concn. ug/l		
1 Benzene, methyl	23	2.56	92	108883	C ₇ H ₈	20		
2 Tetrachloro ethene	66	3.44	164	127184	C ₂ Cl ₄	30		
3 Unknown	121	4.56	-	-	-	95		

ETC

ENVIRONMENTAL
TESTING and CERTIFICATION

TABLE 1: QUANTITATIVE RESULTS and QUALITY ASSURANCE DATA

OCT 24, 198

Conventional Analysis Data (QR10)

300244

Chain of Custody Data Required for ETC Data Management Summary Reports

P2316 NJDEP

NJDEP

PM005

861009 1515

ETC Sample No.

Company

Facility

Sample Point

Date

Time

Elapsed
HoursNPDES
Number

Results

Sample
Concen.
mg/lMDL
mg/l

Petroleum Hydrocarbons (IR)

4.7

.5

300245

CHAIN OF CUSTODY

Company: NJDEP Job No. _____

Address _____

Attention: _____

Sample Description: SAMPLES

CUSTOMER ID	DESCRIPTION	ETC #
PM 005	^{KP} (1) (2) 950ML NON-ETC BOTTLES	P2316
PM 006	(1) 950ML NON-ETC BOTTLES	P2315

Sample(s) Relinquished by: Thomas Amabile

Time: 16:30 P Date: 10/16/86

Sample(s) Received by: Mark Schstadt

Time: 16:30 P Date: 10/16/86

300246

ETC ENVIRONMENTAL
TESTING and CERTIFICATION

NOV 1, 1986

TABLE 1: QUANTITATIVE RESULTS and QUALITY ASSURANCE DATA

Volatile Compounds - GC/MS Analysis Data (QR01)

Chain of Custody Data Required for ETC Data Management Summary Reports

P2315	NJDEP	NJDEP	PM006	861009	1515
ETC Sample No.	Company	Facility	Sample Point	Date	Time Elapsed Hours

NPDES Number	Compound <small>Aroclor and Acrylonitrile values are shown only.</small>	Results		QC Replicate		QC Blank and Spiked Blank			QC Matrix Spike		
		Sample Concen. ug/l	MDL ug/l	First ug/l	Second ug/l	Blank Data ug/l	Concen. Added ug/l	X Recov	Unspiked Sample ug/l	Concen. Added ug/l	Recov
1V	Acrolein	ND	2000	860	1050	ND	-	-	ND	800	107
2V	Acrylonitrile	ND	2000	92.8	105	ND	-	-	ND	80.0	116
3V	Benzene	50	88	49.7	49.0	ND	-	-	ND	50.0	99
4V	bis(Chloromethyl)ether	ND	200	53.1	50.4	ND	-	-	ND	0	-
5V	Bromoform	ND	94	56.3	58.5	ND	-	-	ND	50.0	113
6V	Carbon tetrachloride	ND	56	50.8	50.0	ND	-	-	ND	50.0	102
7V	Chlorobenzene	ND	120	49.6	49.4	ND	-	-	ND	50.0	99
8V	Chlorodibromomethane	ND	62	53.3	52.3	ND	-	-	ND	50.0	107
9V	Chloroethane	ND	200	46.9	46.3	ND	-	-	ND	50.0	94
10V	2-Chloroethylvinyl ether	ND	200	47.5	50.1	ND	-	-	ND	50.0	95
11V	Chloroform	ND	32	61.7	62.0	ND	-	-	16.9	50.0	90
12V	Dichlorobromomethane	ND	44	50.7	49.3	ND	-	-	ND	50.0	101
13V	Dichlorodifluoromethane	ND	200	45.6	47.7	ND	-	-	ND	50.0	91
14V	1,1-Dichloroethane	ND	94	45.6	51.1	ND	-	-	ND	50.0	91
15V	1,2-Dichloroethane	ND	56	47.1	48.4	ND	-	-	ND	50.0	94
16V	1,1-Dichloroethylene	ND	56	45.9	47.9	ND	-	-	ND	50.0	92
17V	1,2-Dichloropropane	ND	120	46.8	45.7	ND	-	-	ND	50.0	94
18V	cis-1,3-Dichloropropylene	ND	100	49.8	48.9	ND	-	-	ND	50.0	100
19V	Ethylbenzene	140	140	47.7	48.5	ND	-	-	ND	50.0	90
20V	Methyl bromide	ND	200	38.0	39.2	ND	-	-	ND	50.0	-
21V	Methyl chloride	ND	200	44.4	47.1	ND	-	-	ND	50.0	87
22V	Methylene chloride	116	56	144	150	3.67	-	-	104	50.0	78
23V	1,1,2,2-Tetrachloroethane	ND	140	56.3	63.1	ND	-	-	ND	50.0	113
24V	Tetrachloroethylene	ND	82	52.1	52.9	ND	-	-	ND	50.0	104
25V	Toluene	413	120	48.9	48.6	ND	-	-	ND	50.0	98
26V	1,2-Trans-dichloroethylene	ND	32	44.1	45.9	ND	-	-	ND	50.0	88
27V	1,1,1-Trichloroethane	ND	76	48.8	48.8	ND	-	-	ND	50.0	98
28V	1,1,2-Trichloroethane	ND	100	53.6	54.8	ND	-	-	ND	50.0	107
29V	Trichloroethylene	ND	38	49.5	48.5	ND	-	-	ND	50.0	99
30V	Trichlorofluoromethane	ND	200	48.3	50.8	ND	-	-	ND	50.0	97
31V	Vinyl chloride	ND	200	43.7	47.6	ND	-	-	ND	50.0	87
18V	trans-1,3-Dichloropropylene	ND	200	47.8	45.7	ND	-	-	ND	50.0	96

ATTACHMENT 5
ANALYTICAL RESULTS FOR METAL CHIP SAMPLES

300247



300248

MATERIALS EXPERTISE, INC.

1275 BLOOMFIELD AVENUE • FAIRFIELD, NEW JERSEY 07004 • (201) 227-9544 • FAX (201) 967-8240

September 10, 1990

Klockner & Klockner
164 Franklin Avenue
Rockaway, NJ 07866-0287

Attention: Mr. Joe Klockner

Ref: MEI Log #8304

Subject: Submitted samples of metal turnings
Sample #1: labeled as taken from below grade
Sample #2: labeled as taken from above grade
(surface sample)

Work requested: Identification of the basic composition.

Results:

<u>Element</u>	<u>Sample #1 (below grade). Semi-quantitative estimates</u>	<u>Sample #2 (above grade). Semi-quantitative estimates</u>
Iron	.03-.3%	.03-.3%
Silicon	.1-1	.1-1
Magnesium	.03-.3	.03-.3
Manganese	.1-1	.1-1
Nickel	.0001-.001	.0001-.001
Copper	.1-1	.1-1
Zinc	.01-.1	.03-.3
Titanium	.005-.05	.005-.05
Aluminum	Balance	Balance

No other elements detected.

Comments:

1) The samples were aluminum base, almost identical and contained only small amounts of other elements.

2) It is possible to analyze further by performing a quantitative analysis for the elements found, if desired.

If we can be of further assistance, please do not hesitate to call.

Respectfully submitted,
MATERIALS EXPERTISE, INC.

Milton S. Schwartz
Milton S. Schwartz, M.S.
Metallurgical Engineer

MSS:bac

ATTACHMENT 6

NJDEP-BFO INSPECTION REPORT FOR MASDEN INDUSTRIES

300249



INVESTIGATION

300250

CASE #: 85-12-24-02N

DWM FILE #: 14-34-09

TIME ARRIVED: 1315

INVESTIGATOR: Carolyn Clark/Rich Collister

DATE: 1-6-86

TIME DEPARTED: 1445

LOCATION: Masden Industries Inc

PROPERTY OWNER: Klocner & Klocner

ADDRESS: 20 Elm Street

MAILING ADDRESS: 164 Franklin Ave

Rockaway, New Jersey 07866

Rockaway, New Jersey

LOCATION TELEPHONE #: (201) 625-3500

BLOCK: 5

LOT: 6

EPA ID #: NJD001476092

LOCAL HEALTH DEPT. REP. Mr. Ferdinando

TELEPHONE #: 361-8200

ORIGIN OF COMPLAINT: Incident report filed by ECRA

TELEPHONE #: _____

NATURE OF COMPLAINT: Storage shed containing hazardous substances unclaimed by occupant

PHOTOGRAPHS TAKEN: none

SAMPLE #: _____

FINDINGS: On Monday January 6, 1986 an inspection of the above stated facility was done to investigate the storage of hazardous substances in a metal storage shed on the property. We met with David T. Landsittel.

There are four companies operating at 20 Elm St with Masden Ind. Inc. as the parent Co. of Multiform Metals Inc. Dynaglass Inc. and Graphamics Engineering Inc. are the two other companies operating in the same main production area. The relationship between Masden Ind. Inc and the latter two companies are common ownership. Attached is an explanation of what each of the four companies does.

WASTES GENERATED : According to Mr. Landsittel no hazardous wastes are generated at this location. The reason an EPA ID # was obtained was in order to dispose of material found approximately three years ago when all four companies were brought to this location. The waste was shipped off site with a manifest; a copy of which will be sent to BFO. An additional shipment of manifested waste was done in followup to NOV and AO regarding May 13, 1985 and June 17, 1985 BFO inspections. A copy of the manifest is attached.

A copy of a Hazardous Substances Questionnaire from Borough of Rockaway is attached to this report. In it is a map of the inside of the building with notations of where haz. substances are kept and what the substances are.

INVESTIGATION

CASE # 85 - 12 - 24 - 02N

DATE: 1-6-86

FINDINGS AND SUMMARY:

Permits: Mr Landsittel was not aware of any permits with DEQ for the following equipment: an exhaust fan over a Triethylene glycol bath (no waste generated from this bath a carbon filter bag house (the frequency of removal & disposal methods were unknown by Mr. Landsittel), and a furnace for drying glass tubing (Dynaglass, Inc operations) which is vented to outside,

Site Inspection:

A) On the inside east wall of the production area is an exhaust hood over a Triethylene glycol bath used to melt sugar in the bottom of glass tubes (Dynaglass, Inc). The triethylene glycol is kept in a container adapted by cutting a 55 gal drum horizontally to create a 6" deep tub. According to Mr. Landsittel the bath has not been drained that he can remember. Approximately 5 gal of Triethylene glycol lasts an entire year due to minimal evaporation.

B) To the left side of the hood is a sump pump which collects non-contact cooling water from a vacuum pump then pumps it into a storage drain.

Outside Inspection:

C) A 6" white PVC pipe empties into a storm sewer, the pipe runs horizontally along the east side of the building and is fed by four verticle PVC pipes 4" diam. These pipes were traced back through the building and appear to collect water from the roof of the building. One joint between the horizontal and verticle pipe was broken creating a large puddle of ice in the yard.

D) At the southeast corner of the building is a bag house with four filter bags to collect carbon dust from GraphamcsEngineering Inc. operations. Below and around the filter bags ^{are} a few inches (depth-6' area) plastic shavings similar in appearance to 1" lengths fo curled cassette tape. This material was explained to be a result of machining plastic parts and allowing scrap to go through the filter system.

E) Two box trailers contain old equipment

F) Under the two box trailers are the remains of a drum that has rotted and collapsed, and an empty drum which has been used as a shipping container.

G) Additional debris in the yard include wooden skids, a ladder and metal ductwork which Mr. Landsittel claims was left on the site by an unknown source.

H) A metal storage shed is set on a cement berm with skids in the bottom over the asphalt parking area. The list of the contents in the shed is attached. As noted on the list Mr. Landsittel claimed two boxes of substances (not wastes) are to be shipped to

300252

INVESTIGATION

CASE # 85 - 12 - 24 - 02N

DATE: 1-6-86

FINDINGS AND SUMMARY:

Haiti. He also said he didn't know where any of the rest of the substances came from and claimed they were not Masden Industries waste. One container has a label showing Dynaglass Inc. name, two had labels of substances which also appear on the Hazardous Substance Questionnaire submitted to the Borough of Rockaway.

Summary:

No hazardous waste violations were found. Although hazardous substances are contained in the shed because Mr. Landsittel claimed the source is unknown of the material. A field NOV was not issued.

During a negotiating meeting between BC&E and Masden held on 1-9-86, Mr. Landsittel agreed to remove all substances from the shed that are Masden's. Reinspection will be done on 1-15-86. *Copy attached*

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT

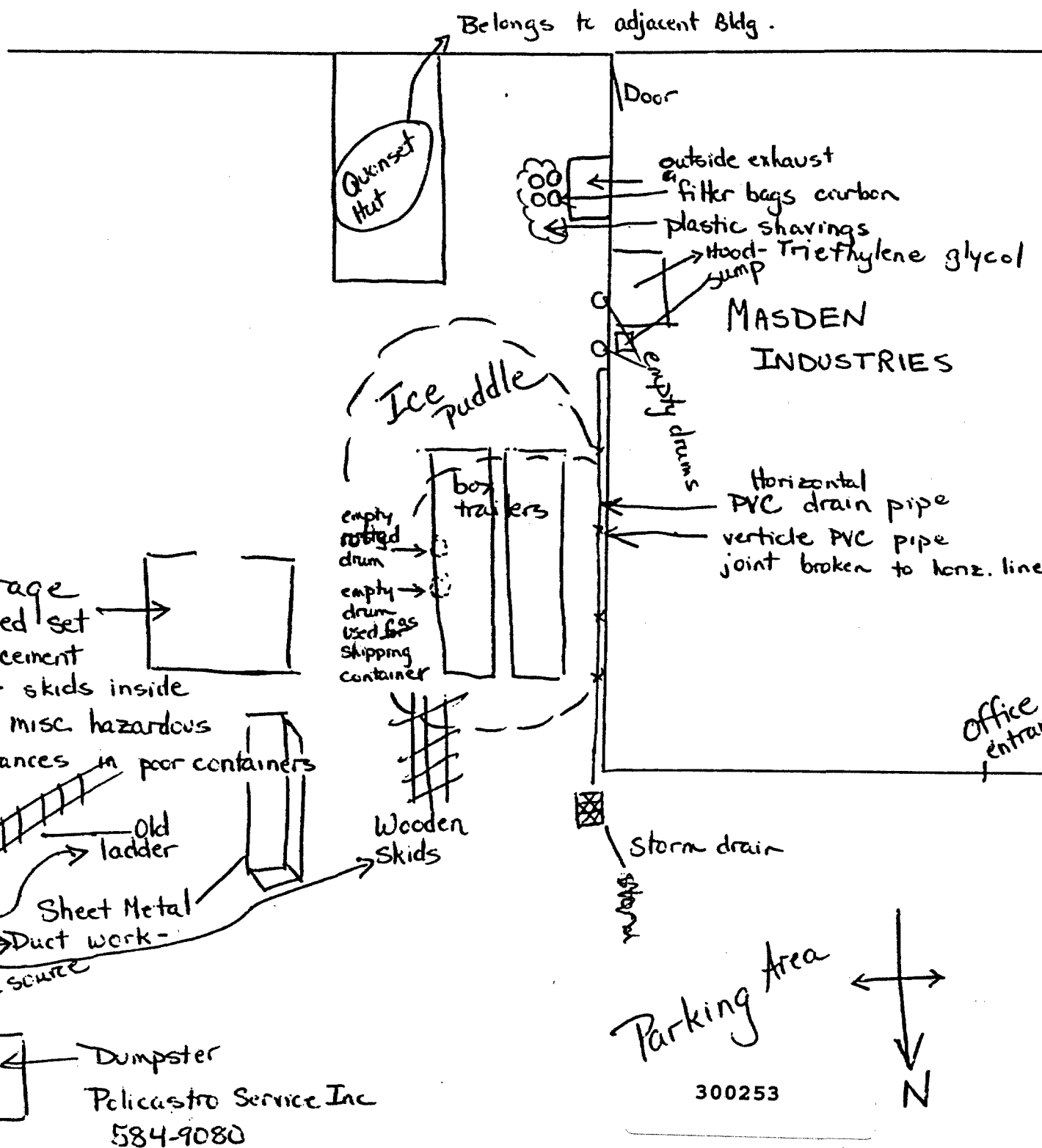
INSPECTION REPORT

SKETCH

NAME OF FACILITY Masden Industries Inc

DATE 1-6-86

INSPECTOR Carolyn Clark



MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO BC&E DATE 1-15-86
FROM Carolyn Clark through Donna Dawson
SUBJECT Masden Industries, Inc.

On January 15, 1986 between 1000 hours and 1130 hours a follow-up inspection was done in order to verify clean-up of hazardous substances noted during 1-6-86 inspection and discussed at 1-9-86 BC&E meeting. (See memos in file regarding these dates). During the inspection I was accompanied by Rai Belonzi and Rich Collister of BC&E. We met with Mr. David Landsittel prior to field inspection; he did not accompany us.

Mr. Landsittel provided copies of shipping papers (attached) used to ship materials in 1983 to Haiti. This shipment had been understood at the last meeting to be hazardous waste which was manifested as waste. It was stated at the 1-15-86 inspection that the material was shipped for use in their Haiti facility. Mr. Landsittel said this was agreeable to all parties involved at the time. Names of DEP personnel are unknown. An inspection was done of the inside of the plant and the shed outside. Attached is a list of the materials originally found in the shed (1-6-86 inspection) and their current or proposed status.

Regarding the wastes that are still in the shed; Masden is not taking responsibility for them and has spoken to the property owner about them. Masden has offered the use of their EPA ID# to the property owner providing the owner pays for disposal. Rai Belonzi explained to Mr. Landsittel that the generator is responsible for the waste if any questions or problems should arise during or following their disposal.

Mr. Landsittel would like to delist but was advised that delisting could not be granted until there is no waste on site irregardless of whether Masden claimed the waste did not belong to them.

300254

inspection of 17/86

* Mr La Bittel said these are to be shipped to Haiti

Wastes found in shed

+ Dynaglass is same ownership as Masden
X Substances on Masden Ind. fire dept report

- 1- 55 gal with drum pump - empty
- 1- 55 gal multi purpose gear oil - material in it.
- 1- 55 gal unknown substance in it
- 1- 5 gal pail Acetic Acid
- 1- 20 gal fiber drum - Copper Cyanide
- 2- 90 lb. Carboys - Ammonium Hydroxide
- 1- 20 gal fiber drum - Rodine 50
- 5- 5 pint containers Hydrochloric Acid
- 1- 5 pint container Sulfuric Acid
- 3- cardboard boxes unknown contents
- 1- ~20 gal keg like container - oxidizer
- 1- 20 gal - black plastic drum made out to Dynaglass Inc
- 1- 20 gal - white plastic container Fluoboric Acid
- 1- 5 gal plastic bottle - $\frac{1}{2}$ full red liquid
- 1- 55 gal fiber drum with $\frac{3}{5}$ white powder and a 5 gal empty clear plastic bottle sitting inside on powder
- 1- 55 gal miscellaneous material - ..
- 1- 20 gal fiber drum - paper + lab ware debris
- 1- 20 gal - rusted drum, label not readable
- 2- 5 gal pails stacked one on top other; "Oxidizer" on top; white crystal formed material protruding from between drums; bottom drum rusted; no label visible
- 1- white styrofoam pack - nitric acid

7-42

HW/EF #
Time at Facility
Arrived 1300
Departed 1415

New Jersey Department of Environmental Protection

300256

Waste Management Investigation

Inspector: B. CZACHOR Date: 06/17/85 Person Contacted: DAVID LANDSITTEL

Location: MASDEN INDUSTRIES INC. Telephone: 201-625-3500
Address: 20 ELM STR. EPA I.D.# NJ D001476092
ROCKAWAY, N.J. 07866 Property Owner: KLOINER & KLOINER
Owner's Address: 164 FRANKLYN AVE

Block: 5 Lot: 6 ROCKAWAY, N.J.
Health Department Representative Contacted: CLEMENT FERDINAND Phone #: 361-8200

Complainant: Case #85-04-19-02N

Complaint: RANDOLPH TOWNSHIP HEALTH DEPARTMENT

Photographs Taken NO Sample Numbers NO
Findings:

On Monday, 06/17/85 the DEP-DWM inspector GARY BEDRISIAN and I conducted a follow up investigation, at the MASDEN INDUSTRIES Inc., located at 20 ELM STR, ROCKAWAY, N.J. in response to the case #85-04-19-02N

On site we met MR. DAVID LANDSITTEL a company's vicepresident, who informed us on following:

- 1) Attached copy of the letter ^{04/27/85} from the company to Rockaway Borough authorities describes exactly the type of business and operations conducted on site
- 2) The company does not generate a hazardous waste. The EPA ID number was obtained for one time shipment of waste and it was not used, because the material was shipped to the another facility located on Haiti. Copies of marine shipping papers are attached.

3) TN annual generators report submitted to the DEP company stated that they are not generating

Incident Report #: 85-0 -19-02N
Subject: MASDEN INDUSTRIES INC.

300257

HW/EF #

Date: 06/17/85

Page 2 of 3

Findings and Summary:

a hazardous waste, but they did not request to be delisted.

- 4) Since last investigation of 05/13/85, conducted by ~~the~~ inspector LEONID CRNETI and me, the company made some attempts to remove a waste material. They contacted a Waste Conversion Co. in Pa, and AETE from N.J. but both failed to accept the waste, because there is no chemical analysis and quantity of it is too small.

Observations.

- 1) During this inspection I observed that company significantly improved the housekeeping at the loading dock area, which appeared to be in fair status, with no wastes in storage.
- 2) The parking lot noted during my last visit 05/13/85 as being sloppy, during this visit it appeared to be cleaned up, except the four drums being in storage on the asphalt paved surface under the trailer box. The drums storage practice was not in accordance with the N.J. Haz. Waste Regulations. Due to that the following violations were noted: 9.4(d)4i - one open top container not securely closed, 9.4(d)4v - all containers (four) were not labeled. 9.4(d)2 - three of them noted in bad condition 9.3(a)3 - no accumulation start date on any container.

Incident Report #: 85-1-19-02N
Subject: MASDEN INDUSTRIES Inc.

Date: 06/17/85
Page 3 of 3

Findings and Summary:

58:10-23.11 - discharge of unidentified substance on the parking lot which may travel to the storm sewer openings (the spill was about 4x6' size of black oily-looking substance on the area under the trailer box)

7:26-12.1(a) - for having the drums in storage for more than a 90 days time limit.

Conclusions and recommendations:

- 1) The company appears to be small quantity generator but they claim that no hazardous waste is generated at all.
- 2) MR. DAVID LANDSITTEL was recommended to dispose of those four drums of unknown waste material as soon as possible in accordance with N.J. Haz. Waste Regulations. Also he was advised to contact the DEP - Advisory Program in case if he needs any assistance, ^{the phone #} 609-292-834 was given to him.
- 3) Because of the bad conditions of three containers and storm sewer openings on parking lot on which the drums are stored, I decided in the office to issue an additional violation of N.J.A.C. 7:26-9.2(a)2 - no person shall handle a hazardous waste in manner which may cause an unauthorized discharge of pollutants into the surface water of this State.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT

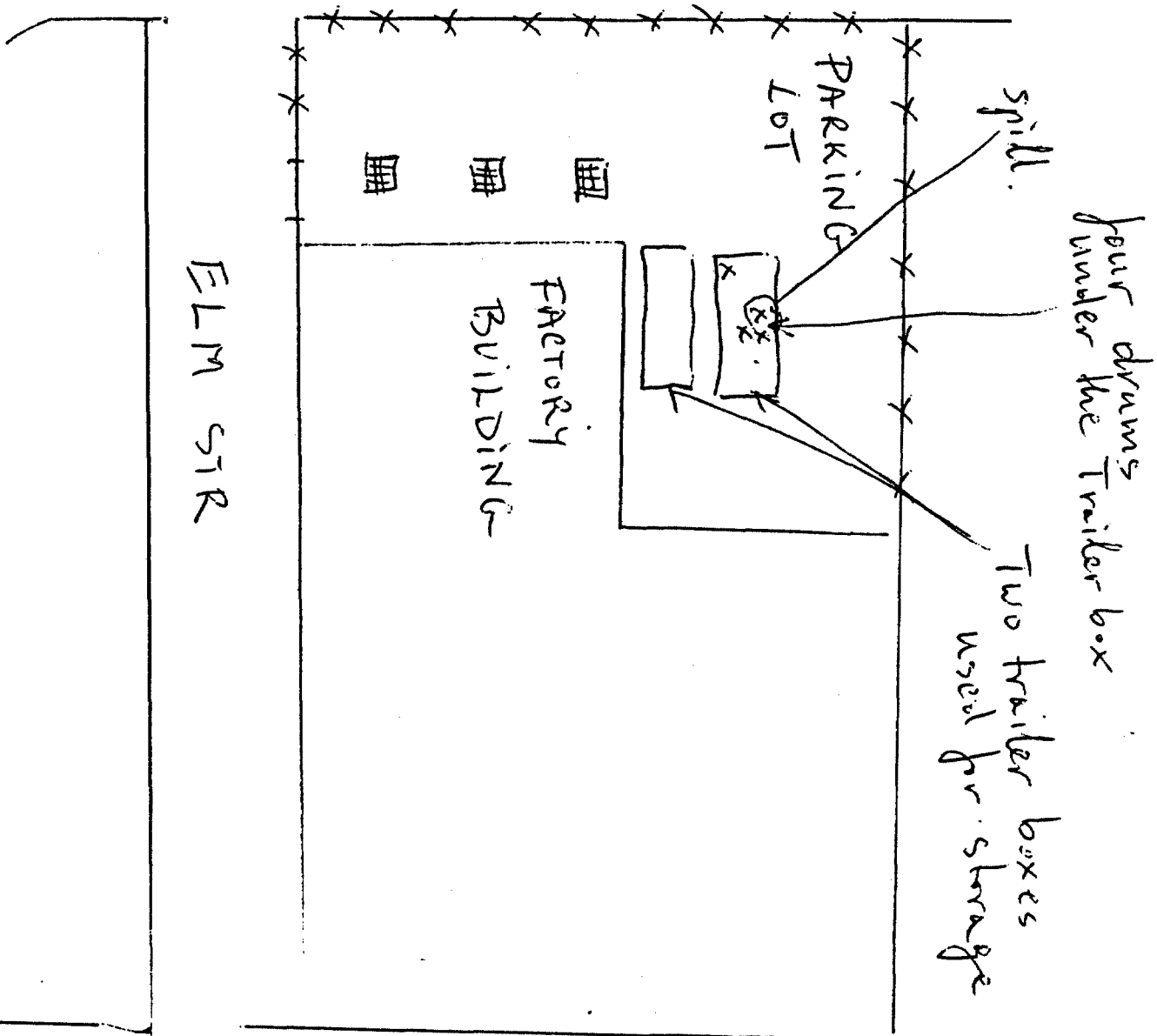
INSPECTION REPORT

SKETCH

NAME OF FACILITY MASDEN IND. INC.

DATE 06/17/85

INSPECTOR B. CZACHOR



ATTACHMENT 7
NJDEP INCIDENT REPORT

300260



INCIDENT REPORT

D.W.M. ASSIGNED CASE NUMBER <u>84-04-19-024</u>		HOT LINE <input type="checkbox"/>	INDEXED <input type="checkbox"/>
DATE <u>04-19-85</u>	TIME (Military) <u>1400</u>	D.W.M. ID NO. <u>3231 17</u>	

INCIDENT REPORTED BY:

NAME <u>PETER BILDI</u>		PHONE <u>361-8200</u>	
AFFILIATION <u>HEALTH DEPT</u>		CODE <input type="checkbox"/>	
STREET			
CITY <u>ROCKAWAY/RANDOLPH HEALTH</u>		STATE	ZIP CODE

INCIDENT LOCATION:

NAME <u>MAGDEN INP</u>		PHONE <u>625-3500</u>	
STREET <u>REI FARM ST</u>		UTM VERT	UTM HORIZ
CITY <u>ROCKAWAY BEACH</u>	COUNTY	STATE	ZIP CODE

 SOURCE OF SPILLED AND/OR DISCHARGED SUBSTANCE: Confirmed ☐ Alleged ☐ More Than 1 Source ☐

COMPANY NAME		PHONE	
CONTACT <u>SAME</u>	TITLE		
STREET		DEP COMPANY NO.	
CITY	COUNTY	STATE	ZIP CODE

 SUSPECTED SPILLED AND/OR DISCHARGED SUBSTANCE: Confirmed ☐ Alleged ☐ More Than 2 Substances ☐

1. <u>CYANIDE</u>	3. <u>55 GAL DRUM CONTAMINATED</u>	SUBSTANCE NO.
AMOUNT SPILLED <u>55 GAL</u>	UNITS <u>1</u>	S/L/G/M
2. <u>64% LEAD/TIN SOLUTION</u>		SUBSTANCE NO.
AMOUNT SPILLED <u>6 250</u>	UNITS <u>1 GAL</u>	S/L/G/M

DATE OF INCIDENT <u>04-19-85</u>	TIME (Military)	TEMP.	WEATHER	WIND (Dir. & Vel.)
SPILL ORIGIN				CODE